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Bed Bugs

Come Back with a Vengeance

Controlling Them Quickly is Key to Slowing Their Spread

Barb Ogg
UNL Extension Educator

For 40 years, bed bugs seemed to be nearly extinct, but in the last decade, this blood-sucking pest has rebounded with a vengeance. Bed bugs are infesting hotels, motels, apartments, dormitories, nursing and retirement homes and single-family homes. The traditional thinking is bed bugs move from place to place in luggage of travelers, in used furniture or with overnight visitors. But, bed bugs are taking advantage of our mass transit systems and have been found on buses, subways, trains and planes. To my knowledge, this hasn’t yet happened in Nebraska, but has happened elsewhere. In some parts of the U.S., bed bug infestations and complaints have doubled each year since 2003. Unfortunately, there doesn’t seem to be a “silver bullet” on the horizon which will slow the spread of these insects.

Bed bugs are non-discriminatory and will feed on anyone, but people in high-density housing are more likely to be infested. This is simply because more people move in and out of hotels/motels, apartment buildings, dormitories and condominums; more visitors; more people traveling. It is a matter of chance.

Bed bugs have very flat bodies and can squeeze behind baseboards or electrical outlets and move to the next bedroom or apartment to find a new food source. Left unchecked, eventually all bedrooms or apartment units will be infested.

Landlords who ignore a bed bug infestation early on will end up with a much larger problem which is more expensive to treat. For about half the victims, bed bug bites are very itchy. Bed bugs do not seem to transmit disease...at least it has never been scientifically documented. I confess, I am not a mental health expert, but I think many people who live with bed bugs will experience anxiety, stress and insomnia, knowing when they sleep, small insects will be coming out of cracks and crevices to feed on them.

Control Problems

Purdue University researchers showed even when the best methods were used, it took two or three treatments to eliminate bed bugs from apartments. This study also found bed bugs were still present in some apartment units after four treatments. They concluded some of their treatment difficulties were due to extreme clutter, which provides many hiding places for bed bugs.

The clutter problem is just one impediment to eradicating bed bugs. To achieve control most quickly, cooperation is needed between the home inhabitant and the pest control professional. To make insecticide applications more effective, actions are needed the pest control professional can’t or won’t do. Actions needed by the home inhabitant include:

- Laundering bedding (or putting non-washable objects in a hot dryer for 20 minutes).
- Vacuuming bed bugs (and throwing away the vacuum bag).
- Purchasing and using specially-made bed bug resistant encasements on mattress and box springs.
- Throwing heavily-infested furniture away, especially overstuffed sofas and chairs.

Another reason bed bugs are so hard to control is because most bed bug populations are resistant to pyrethroid insecticides. Today, most products labeled for use inside the home are pyrethroids, including products sold to professionals or over-the-counter. Two professional-use products used widely for bed bugs include Demand® (lambdacyhalothrin) or Suspend® (deltamethrin). University of Kentucky researchers showed bed bugs have some resistance to these pyrethroid products. Even though there is bed bug resistance to pyrethroids, these insecticides are still better than other products on the market. To kill bed bugs, insecticides must be applied so they “contact” the bed bug. In other words, inspecting and finding all bed bug hiding places and treating bed bugs directly is the key to achieving control.

Economic Issues

Because killing bed bugs takes considerable time and effort, companies which do bed bug control are pricing their services accordingly. Most will charge each time they do a treatment and are unlikely to give guarantees. Some will not treat places where there is excessive clutter. At $75–$100 or more per visit, many low-income families just can’t afford to hire a pest management professional to do the work.

Many people feel there is a negative stigma attached to having bed bugs. Even though bed bug infestations aren’t necessarily related to “dirty” houses, some families don’t want anyone else to know. They won’t tell their landlord.

Not controlling bed bug infestations in a timely manner is the number one reason why bed bugs are spreading so quickly. The longer bed bugs are ignored, the greater the likelihood they will spread to other places. Bed bugs travel in back packs, purses and on clothing as people go about their daily activities. Bed bugs can be taken to daycare centers, schools, doctor’s offices and clinics, hospitals, movie theaters and even workplaces.

Treatment Dilemma

So how do we advise low-income families who cannot afford professional treatment to deal with bed bugs? This is a dilemma.

There are over-the-counter (OTC) products which can be purchased by the general public. These products contain the same active ingredients as professional-use products labeled for bed bug control. Unfortunately, these OTC products are not labeled for bed bug control. Some may be labeled for indoor use, on baseboards, carpets, but not on beds. Because it is a federal offense to use pesticides in a manner inconsistent with directions on the label, it would be unthinkable to recommend off-label use of pesticides. It also might pose a health risk for the person using the products and his family, especially when he/she has had no training in controlling bed bugs.

Clearly, using insecticides in bedrooms see BED BUGS on next page
Bed Bug Workshop for Landlords and Property Managers, May 21

In the last five years, bed bug infestations have increased in Nebraska and they are especially problematic in multi-family housing units. Once established, bed bugs can be hard to eradicate. If you are a landlord or property manager, you need to know how to deal with this pest problem. UNL Extension and the Lincoln-Lancaster County Health Department (LLCHD) will present a workshop, “Bed Bugs: What You Need to Know!” on Thursday, May 21, from 5:00-8:00 p.m. at the Lancaster Extension Education Center, 444 Cherryrock Road, Lincoln. Topics will include bed bug identification, biology and behavior, and steps to take if you suspect a bed bug infestation. Presenters will also discuss bed bug management using chemical and non-chemical actions and review LLCHD regulations regarding bed bug control and who will use products labeled safe to use. A registration fee for this program is $20. No preregistration is required. Presenters include:

• Amy Dobles-McNeely, Nebraska Department of Health and Human Services
• Barb Ogg, UNL Extension Educator-Lancaster County
• Jim Bare, Lincoln-Lancaster County Health Department
• Clyde Ogg, UNL Pesticide Safety Education Program

This workshop is geared toward educating landlords and property managers about bed bugs, but anyone interested in this topic will find it educational. For more information about this workshop, contact Barb Ogg, 441-7180. A brochure detailing this program can be found at http://lancaster.unl.edu/pest/news.shtml.

What Can People Do If They Can’t Afford a Professional?

All bedrooms need your focused attention given in the following steps. Bed bugs will also feed on sleeping people, usually at night; they will still stick around if people sleep there. Bed bugs leave black spots or smears where they spend time. Look for these spots. Bed bugs will also be found behind pictures, on curtains, in curtain frames and other locations.

1. Use a vacuum cleaner to suck up all the bed bugs you find. Throw the vacuum cleaner bag away or freeze the bag for at least 24 hours. Make sure you vacuum where carpet meets the wall.

2. Encase your mattress and box springs. This will prevent bed bugs from feeding on you. The Protection Agreement mattress encasement has been shown to work best. These mattress encasements are expensive, but getting rid of both mattress and box springs, but still less than buying a new mattress and box springs today. It’s unlikely today that any bed bugs to hide, but box springs are likely to contain large numbers of bed bugs. If you decide to buy a new mattress set, encase both mattress and box springs immediately.

3. Launder all your bedding and dry it in a hot dryer. Items which cannot be laundered, can be dried in a hot dryer. Don’t forget pillows.

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5. If you have a headboard or other structure the bed sits on, these will probably be infested with bed bugs but will need to be treated in some way or discarded. To prevent bed bugs from getting in your home and sleeping on your encased mattress/box springs on a basic metal frame, treat the following:

• The base of the bed and the bottom of the can. Place the bed legs in containers. Don’t worry about your mattress and box springs — you may find a used field guide at a very reasonable price. Birdwatchers quickly learn to earn birds before seeing them. You’ll enjoy more birds if you can identify them by sound or song. You can purchase a birding CD or use resources on the internet. The Cornell Lab of Ornithology has a nice collection of bird identification resources, including their songs. Visit and use the site for free at http://www.birds.cornell.edu/ ALLbirds/BirdGuide

At some point, you may decide binoculars will help you spot birds at a distance. When buying binoculars, do not judge by price. Don’t waste your money on the cheapest pair of binoculars. If you want to buy binoculars, do some research. Take your time and save for the best binoculars you can afford.

Start bird watching right around your own home. Enjoy a large variety of birds in your backyard by offering food, water, a place to build a nest and the right kinds of landscape plants. Learn what native plants can be added to your landscape to help attract native wildlife. Native plants provide protection, nesting sites and a food source for the birds. For help and ideas, check out the following resources.

• NeB-Guides from University of Nebraska Lincoln Extension

FOR MORE INFORMATION The free NeBGuides described above are available at the extension office and online at http://lancaster.unl.edu/pest/birds.shtml • The Web site also features additional information on attracting birds, bird identification links and much more.

Bird Watching Trips

You don’t have to go far to find bird watching sites right here in Nebraska. There are dozens of locations right around Lancaster County. Make bird watching part of your family’s summer vacation plans. Take the kids and enjoy spending time outdoors. Bird watching is fun for all ages. With enough practice, you can learn to know what the birds are looking for. For bird watching trails and locations in Nebraska, go to http://www.nebraskabirdingtrails.com.

And remember, we can bird watch as we walk to our cars, schools or scurry about our daily lives. Every day just take a moment...listen and enjoy!
May is Time to Control Leafy Spurge

Tom Dorn
UNL Extension Educator

In my travels around the county, I have seen many patches of leafy spurge. Leafy spurge is a noxious weed according to the Nebraska Noxious Weed Law and the Nebraska Noxious Weed Law. Leafy spurge is found primarily on untilled land such as pastures, range, roadsides, woodlands and farmsteads. It typically occurs near the road to cattle and can effectively run the carrying capacity of patches where it is growing because cattle soon learn to avoid grazing near it.

Identification
Leafy spurge is a persistent, deep-rooted perennial which reproduces by seeds and roots. Leafy spurge has a somewhat woody crown below the soil surface. Each crown area produces several upright stems giving the plant a clump-like appearance. In addition, new stems arise from buds on lateral, secondary roots. Stem growth starts in April, making leafy spurge an early, vigorous competitor with forage and pasture plants.

The plant bears numerous linear, long, pointed, tan-colored, smooth margins. See Figure 1. Leaves have a bluish-green color but turn yellowish or reddish-orange in late-spring. If you are not certain whether the weed you are looking at is leafy spurge, pull a leaf off of the plant or break the stem. If a white sap oozes from the wound, it is leafy spurge.

Leafy spurge produces a flat-topped cluster of yellowish-green, petal-like structures called bracts, which bear the true spurge flowers. The showy, yellow bracts appear in May and give the plant a “blooming” appearance. The true spurge flowers, however, develop about 10 days later and have small, green bracts. See Figure 2. The distinction between yellow bract appearance and true flower is important for timing herbicide applications. Spring-applied herbicides are more effective when applied on plants with developing true flowers.

Seeds are borne in pods which contain three gray-brown, sometimes speckled, oblong, smooth seeds. At maturity, the pods pop open, throwing seeds up to 15 feet from the parent plant. About 140 seeds are produced per stem and seeds may remain viable in the soil for up to 8 years. Leafy spurge peak germination time is late-April to early-May. New seedlings develop throughout the summer but usually do not flower during the first year. Leafy spurge seedlings can vegetatively reproduce from root buds within 7–10 weeks after germination.

Control

Chemical control recommendations listed in the UNL Extension publication 2009 Guide for Weed Management (EC 09-130) include:

- 2,4-D (4L) at 2 quarts per acre at flower bud stage (for suppression of seed production — annual treatments necessary).
- Grazon PN at 2 quarts per acre at flower bud stage (for suppression of seed production and gradual stand reduction over several years).
- Tordon 80 at 1 1/2–2 quarts per acre (retreatment necessary for several years).
- Spot treatment of seedlings and shoots emerging from deep root buds will be necessary for many years after a stand appears to be controlled. Always follow label directions.

Getting the Most Out of CRP

USDA regulations now allow you to use some CRP fields as pasture or hay periodically. To make the most of this opportunity, Dr. Bruce Anderson, UNL extension forage specialist, gave the following advice on his Forage Minute radio spot.

“For years, the only time you could use CRP was in an emergency, and then it often was so late you got little good from it. Times have changed, though, so many of you can actually plan on using the forage grown on CRP fields. Look at what kind of feed currently is available from most fields. Then imagine what it will be like after early July, when use can begin. In most cases, much old dead trash exists so yield of new green growth will be low and weeds may be a problem.

One of the best ways to improve yield and quality of CRP forage is a prescribed burn in the spring. This removes old, dead trash, promotes new growth and controls some weeds and trees. Be sure you can burn both safely and legally, though, before you try it.

Weed control options will vary based on the weed problems in your CRP. Thistles and broad-leaves often are controlled best using herbicides like Grazon and Milestone. For specific recommendations, visit your local extension office or review options in our new weed management guide.

Most CRP fields have had no fertilizer for many years, so yields often increase nicely when nitrogen, and sometimes phosphorus fertilizers are applied. I wouldn’t spend money on fertilizers, though, until you have removed the old, dead growth and have controlled most of the weeds. Think ahead. Can you or pasture from your CRP fields improve your livestock program? Take care of it so it can work for you.”

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Sorghum Bread

This recipe was developed by Betty Hagman for Twin Valley Mills, LLC and is provided courtesy of Twin Valley Mills, LLC (www.twinvalleymills.com). Additional recipes using sorghum flour can be found in Bette’s book, The Gluten-Free Gourmet Baked Bread.

1 cup sorghum flour
2 1/2 cups tapioca flour
3 1/2 cups cornstarch
1 1/2 cups teff sorghum grain
1/3 cup dry milk powder or nondairy substitute* (Wiley, 2008)
3 eggs
1 tablespoon corn oil
1/2 cup non-fat dry powdered milk (or powdered buttermilk)*
1 teaspoon sugar
3 teaspoons baking powder
1/2 cup teff sorghum dough enhancer or vinegar
3 tablespoons vegetable oil
1 cup lukewarm water (more or less)
1/2 teaspoon salt
1/2 teaspoon dough enhancer or vinegar
3/4 cup sorghum flour
3/4 teaspoon baking powder
1 teaspoon xanthan gum per cup
1 tablespoon guar gum
1 tablespoon cornstarch
1 tablespoon guar gum

1) Grease an 8-1/2" by 4-1/2" loaf pan and dust with rice flour.
2) Combine the dry ingredients in a medium bowl. [Jenny’s note: I do not add sorghum grain here. I add it near the end of a 3-1/2 minute beating of all ingredients as my dough is too sticky to beat with the mixer if I add it here. Just remember to add it!]
3) In a large bowl, add the heavy duty mixer, whisk the eggs, dough enhancer and oil. Add most of the water, holding back about 3 tablespoons to add as needed. Turn mixer to low and add the flour mixture a little at a time. The mixture should be the consistency of cake batter. Add the remaining water a little at a time to achieve this texture. Turn mixer to high and beat for 3-1/2 minutes. Spoon into the prepared pan, cover and let rise in a warm place about 35 minutes for rapid rising yeast; 60 or so minutes for regular yeast or until dough reaches the top of the pan.
4) Bake 50 to 55 minutes in a 400° F oven, covering after 10 minutes with aluminum foil. [Jenny’s note: I bake in a 350° F oven for about 30 minutes or until done and do not cover with aluminum foil. The crust gets dark—but not burnt—so rub it immediately with butter or margarine after it’s done keep the crust soft as Bette suggests below.]
5) Turn out immediately to cool. For a softer crust, rub immediately with a paper towel or muslin. Cool before slicing.

[Jenny’s note: Gluten-free breads need to be frozen if not eaten within a day to avoid microbial growth. Slice bread and slice soaked in a freezer bag in the freezer. A handy way to freeze the bread is to wrap serving sizes of bread—usually one or two slices—in plastic wrap and place in zip top sandwich bags and then place in a freezer bag. This makes it easy to remove a few slices at a time and desired, carry them along with you if you cannot eat the bread offered somewhere from home.]

[Bette states, “I used the adult drink powder Ensure as my nondairy substitute and it turned out very well. The extra flavor and vanilla in the powder made the best tasting bread.”]

NOTE: If a recipe wasn’t specifically developed to be gluten-free, additional adjustments beyond changing the types of flours may be needed. Learn more about gluten-free diets at the CSA Web site at http://csaceliacs.org.

Sorghum Pancakes

This recipe was developed by Mary Schluckebier, Home Economist, for Twin Valley Mills, LLC and is provided courtesy of Twin Valley Mills, LLC (www.twinvalleymills.com).

1 3/4 cups sorghum flour
3 teaspoons baking powder
1 teaspoon salt
3/4 cup sugar
1/2 cup non-fat dry powdered milk (or powdered buttermilk)*
1 tablespoon corn oil
3 eggs
1 1/2 cups water

Combine dry ingredients. Stir in eggs, oil and water; mix well. Drop by spoonfuls onto a hot, 375°F griddle until golden brown, turning once. Makes about 20 pancakes. If you like thinner pancakes, add more water or add some applesauce.

[Mary states, “They are just fine leaving out the milk and not substituting anything in its place. It may mean adjusting the amount of water to provide the thickness of batter for thick or thin pancakes.”]

Cookie Mix (makes 2 cups)

By Mary Schluckebier

1/4 cup flour, flour
1/3 cup sorghum flour
1/4 cup sweet rice flour


Four Flour Bean General Baking Mix (makes 3 cups)

By Bette Hagman

1 cup tapioca starch
1 cup xanthan starch


Carol’s Sorghum Blend

Reprinted with permission from Gluten-Free Recipes by Carol Fenster, Wiley (2008)

1 1/2 cups sorghum flour
1 1/2 cups potato starch or tapioca starch
1 cup tapioca flour

Whisk together and store, tightly covered, in a dark, dry place.

NOTE: If a recipe wasn’t specifically developed to be gluten-free, additional adjustments beyond changing the types of flours may be needed. Learn more about gluten-free diets at the CSA Web site at http://csaceliacs.org.

Gluten-Free Sorghum Recipes

Jenny Rees and Alice Henneman
UNL Extension Educators

Celiac disease (CD) is triggered by ingesting certain proteins, commonly referred to as “gluten,” which are naturally present in some cereal grains. While CD can’t be cured, its symptoms can be controlled through diet.

One of the grains people with celiac disease can eat is sorghum flour processed from food sorghum varieties. According to Barbara Kliment, executive director of Nebraska Grain Sorghum Board, “Whole grain sorghum flour is a wholesome, hearty grain that provides important fiber and has a mild flavor that won’t compete with the delicate flavors of other food ingredients.”

CD is a genetic disorder and may occur in children as well as adults. Approximately one in 135 people may have CD; the majority of these individuals have not been diagnosed. When someone with CD eats gluten, an autoimmune response that damages the small intestine is set off. In turn, the small intestine loses its ability to absorb the nutrients in food, leading to malnutri- tion and other complications. The symptoms vary widely among people. An extensive list of symptoms is given on the Celiac Sprue Association (CSA) Web site at http://csaceliacs.org.

Though gluten is commonly associated with wheat, foods made with barley and rye must also be avoided. The use of oats is questionable at this time. For a comprehen- sive list of all the grains and flours currently considered consistent, questionable or not consistent with a gluten-free diet, visit the CSA Web site at http://csaceliacs.org.

In substituting sorghum flour for grains and cereals, a combination of flours often is used. It is possible to purchase already-mixed all-purpose gluten-free baking flours. Or you can mix your own — following are three substitution possibilities which include sorghum flour.

Because sorghum does not contain gluten, a “binder” such as xanthan gum, must be added in gluten is needed to create a successful product. Add 1/2 teaspoon xanthan gum per cup of sorghum flour for cookies and cakes or one teaspoon per cup of flour for breads. Other ingredients used as binders in some recipes include egg whites, unflavored gelatin, cornstarch and guar gum. Add 1 teaspoon of any of these additional ingredients as moisture-vapor-proof, air-tight glass or metal containers or plastic freezer bags. Keep in a cool, dry, dark place if it will be used within a few months; store in a refrigerator or freezer for longer storage.

Gluten-Free Sorghum Recipes

By Alice Henneman and Jenny Rees, UNL Extension Educators

The following recipes have been created so they are suitable for someone with celiac disease or who is eating a gluten-free diet.

Sorghum Bread

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If family members have asthma or allergies it is important to be aware of the important asthma triggers in the home and surrounding areas. The CDC (Center for Disease Control) identifies these triggers as important ones to watch for and prevent in homes.

**Environmental Tobacco Smoke**

Environmental tobacco smoke is often called “secondhand smoke,” but this smoke that is breathed in by a smoker but by a second person nearby.

Parents and friends of children with asthma should try to stop smoking and should never smoke around a person with asthma. They should only smoke outdoors and not in the family home or car. They should not allow others to smoke in the home, and they should make sure their child’s school is smoke-free.

**Dust Mites**

Dust mites are all around in everybody’s home, but they don’t cause the allergies that would lead someone to have asthma attacks. If you have asthma you might react to dust mites, or you might be a trigger for an attack. To help prevent asthma attacks, use mattress covers and pillowcase covers to make a barrier between dust mites and yourself. Don’t use down-filled pillows, quilts or comforters. Remove stuffed animals and clutter from your bedroom.

**Outdoor Air Pollution**

Pollution caused by industrial emissions and automobile exhaust can cause an asthma attack. Exposure to air pollution can irritate the lungs and aggravates your asthma.

**Cockroach Allergen**

— Cockroaches and their droppings may trigger an asthma attack. Get rid of cockroaches in your home and keep them from coming back by taking away their food and water. Cockroaches are usually found where food is eaten and crumbs are left behind. Remove as many water and food sources as you can because cockroaches need food and water to survive. Vacuum or sweep areas that might attract cockroaches at least every 2 or 3 days. You can also use pesticides to decrease the number of cockroaches in your home.

**Pets**

— Furry pets may trigger an asthma attack. When a furry pet is suspected of causing asthma attacks, the simplest solution is to find the pet another home. If pet owners are too attached to their pets or are unable to locate a new home for the pet, they should keep the pet out of the bedroom of the person with asthma. Pets should be bathed weekly and kept outside as much as possible. People with asthma are allergic to their pet’s fur, so trimming your pet’s fur will not help your asthma. If you have a furry pet, vacuum often to clean up anything causing an asthma attack. If your floor is not a hard surface, such as wood or tile, and are not carpeted, mop them every other day.

Mold — When mold is inhaled or breathed in, it can cause an asthma attack. Get rid of mold in all parts of your home to help control your asthma attacks. Keep the mold level in your home between 35% and 50%. In hot, humid climates, you may need to use an air conditioner or a dehumidifier. Fix water leaks, which allow mold to grow between walls and under fixtures.

**Other Triggers**

— Sudden strenuous exercise; some medicines; bad weather such as thunderstorms, high humidity, or freezing temperatures; some foods and food additives can trigger an asthma attack. Strong emotional states can cause an asthma attack, as can premedication and an asthma attack. Learn what triggers your attacks so you can avoid the triggers whenever possible and be alert for a possible attack when the triggers cannot be avoided.

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Hand Picking Bagworms

An Effective Control

If you have noticed small bagworms infestations in your landscape, hand picking can be an effective control measure.

Take a walk through your landscape and check all your landscape plants, especially spruce and junipers. You have just a few weeks left to hand pick bagworms from your plant material. Bagworm caterpillars will start emerging from the bags the end of May through early June.

After picking the bagworms from your plant material, place them in a bag and put the sealed bag in the trash. If you have large trees or too many bagworms to effectively pick off your plants, chemical control will be needed after they hatch in June.

If you would like more information on bagworms, go to http://lancaster.unl.edu/hort/bagworms.shtml to view a YouTube video or pick up a brochure at the extension office.

— Mary Jane Frogge, UNL Extension Associate

Garden Guide
THINGS TO DO THIS MONTH
By Mary Jane Frogge, UNL Extension Associate

Gross clippings can be used as a mulch in flower beds and vegetable gardens if allowed to dry well before use. Never use clippings from a lawn that has been treated with a herbicide.

Cabbage loopers and imported cabbage worms are green worms. They eat large holes in the leaves of plants in the cabbage family. For control, caterpillars can be picked off by hand or sprayed with BT (Bacillus thuringiensis), a natural, non-toxic preparation available by various trade names.

Insecticide control can help reduce summer populations.

Identification and Insecticide Control

For maximum landscape interest in a small, vertical space, try trellised, they can create shade and privacy while hiding undesirable structures. For maximum landscape interest in a small, vertical space, try trellised, they can create shade and privacy while hiding undesirable structures.

Chinkapin oak — Quercus muehlenbergii

Acer truncatum — Catalpa distichum (fall color)

Miyabe maple — Acer miyabei

Kentucky coffeetree — Gymnocladus dioicus (fall color)

Elm hybrids — Ulmus

Bur oak — Quercus macrocarpa

Northern catalpa — Catalpa speciosa (in bloom)

Concolor fir — Abies concolor

Shantung maple — Acer truncatum

Source: Nebraska Forest Service

ReTree Nebraska

Important to Diversify When Replanting

ReTree Nebraska is a 10 year cooperative initiative to raise public awareness of the value of trees, reverse the decline of Nebraska’s tree and forest resources and improve the health and sustainability of trees and forests across our state for future generations. The primary goal of ReTree Nebraska is to work in partnership with people across Nebraska to foster the proper planting and maintenance of one million new trees by 2017.

As residents of the Arbor Day State, Nebraskans recognize the value of trees. Forests foster economic development by supporting businesses, creating jobs and generating rural and urban income. Trees clean the air, extend the life of roads, save tax dollars by reducing the need for expensive “hard” infrastructures and reduce heating and cooling costs. In fact, properly planted trees can reduce cooling costs by up to 25 percent. Trees preserve “The Good Life” in Nebraska by creating more livable communities situated in a predominantly agricultural landscape.

Nebraska’s community tree resources have steadily declined in recent decades. A combination of severe weather events like the 1991 freeze, 1997 snowstorm, 2007 ice storm, tornadoes and high winds, chronic drought, poor planting practices, poor species selection, poor pruning practices, the rapid spread of pine wilt disease and a reduced quality of life in our towns and cities.

In addition to recent tree losses, an invasive pest called emerald ash borer (EAB) has the very real potential to kill most of the state’s ash trees, resulting in a potential loss of 25 percent, or more, of the existing community forest resource in many communities. This canopy loss equates to approximately 2.2 million ash trees with an estimated value of $120.8 million annually. Ultimately, the total costs for removing and replacing urban ash trees killed by EBA in Nebraska could reach $1.65 billion. Most experts agree that it is not a matter of if EAB will arrive in Nebraska, but rather when. When it arrives, the state will endure catastrophic losses not only in our community forests, but in conservation plantings and native forests as well.

When replanting trees, it is important to diversify. Nine trees were being promoted for 2009 — see pictures.

To receive updates about ReTree Nebraska, as well as tree tips, sign up for a free electronic list serve. To join, e-mail retree@retree.nebraska.gov with your e-mail address and first and last name.

Source: Nebraska Forest Service

The Nebraska Extension Line
http://lancaster.unl.edu

Horticulture

Page 6

May 2009

May 2009
Aquatic plant growth in and around ponds plays an important role in providing quality habitat for fish and wildlife, increasing aesthetic and recreational benefits. Unfortunately, dense plants and growth can interfere with swimming, boating, aesthetics and fishing. Removal and/or management of some plant species may be necessary to maintain desirable conditions.

Selecting the best treatment or combination of treatments depends on the water plant species, the extent of the problem, economic considerations and pond uses.

First, be certain the pond has an aquatic plant problem. Some plant growth is natural and temporary and does not require treatment. As a general rule of thumb, if the growth is more than 25 percent of the surface area, then treatment may be necessary.

Next, for the most effective control, properly identify and understand the plant species to be treated because each plant type requires a different treatment. For a free of charge identification service, call the UNL Extension program at 472-7783.

Animal manure is a secret ingredient which many home gardeners overlook. Manure offers many benefits, the most notable being increased soil phosphorus and enhanced water infiltration rates. When manure decays, organic phosphates are released and the total phosphorus level available to plants increases. Organic phosphates are released before use. Purchased, bagged manure must be handled carefully so potential E. coli bacteria or other pathogens are not applied or splashed onto edible portions of plants, nor food contaminated from unwashed hands that touched manure or tools.

The best practice is to plow manure into the soil a season or two before planting to properly identify and understand the plant species to be treated because each plant type requires a different treatment. For a free of charge identification service, call the UNL Extension program at 472-7783.

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Using Animal Manure in the Garden

Animal manure is a secret ingredient which many home gardeners overlook. Manure offers many benefits, the most notable being increased soil phosphorus and enhanced water infiltration rates. When manure decays, organic phosphates are released and the total phosphorus level available to plants increases. Organic phosphates may persist for many years after manure applications have stopped.

Next, be certain the pond has an aquatic plant problem. Some plant growth is natural and temporary and does not require treatment. As a general rule of thumb, if the growth is more than 25 percent of the surface area, then treatment may be necessary.

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Elaine Simpson

Lancaster County 4-H is proud to announce Elaine Simpson as winner of May’s “Heart of 4-H Award in recognition of outstanding volunteer service.

Five years ago, Elaine helped start the All American Kids 4-H Club (her two children are members) and was a project leader. Two years ago, she became organizational leader for the club. The club has been recognized as a Nebraska 4-H Club of Excellence the past four years.

“I enjoy helping children to learn new things and have new experiences,” says Elaine. “Watching children grow and learn is very rewarding for me. My favorite experience as a volunteer has been watching children grow and help others in the community.”

Pre-Fair 4-H Leader Training, June 4

New leaders, experienced leaders, 4-H members and parents are invited to this leader training on Thursday, June 4, 9:30 a.m. to 6:30 p.m. (you choose which time to attend) at the Lancaster Extension Education Center. Come and receive information on how to fill out the event tags, expenses and your out of pocket interview judging. Life Challenge, presentations content and other 4-H county fair information. MUST preregister by June 2 by calling 441-7180.

4-H Bicycle Safety Contest, June 27

This year’s 4-H Bicycle Safety Contest will be held before the county fair on Saturday, June 27, 9 a.m. at the Lancaster Extension Education Center. MUST preregister by June 23 by calling 441-7180 (there is no entry form). Late registrations not accepted. See Fair Book p. 34.

Quality Assurance Training for Market Animals, May 7

4-H/FFA members planning to exhibit market beef, swine or sheep at this year’s Lancaster County Fair or Nebraska State Fair are required to attend a Quality Assurance training. Market rabbit exhibitors are strongly encouraged to attend a training session that has already done so. A Quality Assurance training will be held Thursday, May 7, 9:30 p.m. at the Lancaster Extension Education Center. For more information or to sign up, please call Deanna at 441-7180.

4-H/FFA Sheep Weigh-In, May 21

4-H/FFA members planning to exhibit market lambs at the Lancaster County Fair in the Sheep Performance contest will need to have their lambs officially tagged and weighed on Thursday, May 21, 6-8 p.m. at the Lancaster Event Center - Pavilion 2. Due to time constraints and budget, Deanna will no longer be able to come to each farm individually.

Nominating your favorite 4-H volunteer by submitting the form available online at http://lancaster.unl.edu or at the extension office. Nominations of co-volunteers welcome.

Life Challenge Contests County-Level Senior, May 30

4-H Life Challenge judging contests help youth learn more about issues related to family, consumer science (FCS). Contests are open to all 4-H'ers, need not be enrolled in a specific project. Contact Jami at 441-7180 for more information.

County-level Senior Life Challenge (for ages 12 and up) is scheduled for Saturday, May 30, 9:30 a.m. at the Lancaster Extension Education Center. Preregister by May 28 by calling 441-7180. County Life Challenge contests will be based on the following 4-H manuals: Fast Foods; You’re the Chef. Foodworks, Youth in Motion, Design Decisions, Furnishings on a Shoestring, Shopping in Style, Attention Shoppers, ESL I, 2, and 3. They may be checked out at your local extension office for the contest to study.

Statewide FCS Life Challenge (for ages 12 and up) will be held Saturday, June 29 and Tuesday, June 30 on UNL East Campus. To participate, please contact Jami at 441-7180 by June 8. Information is on line at http://4h.unl.edu/programs/Country-level Junior Life Challenge (for ages 8-11) will be held Saturday, July 11 at 9:30 a.m. at the Lancaster Extension Education Center. Preregister by July 9 by calling 441-7180. Contact Jami for study packet.

Lancaster County Horse VIPS to Host Pre-Districts Show/Clinic, June 6

To help prepare for districts and state, the Lancaster County Horse VIPS is hosting a special pre-districts show/camp/fundraiser on Saturday, June 6, 9 a.m. at the Lancaster County Event Center - Pavilion 3. All counties are welcome. The show will include a special format and all age groups — elementary, junior and senior — can participate in the events of Pleasure, Showmanship, Western, Western Equitation and Horsemanship. All age classes can compete for prizes in a Hippity Contest.

This will be an excellent opportunity for all 4-H riders to practice for districts. It will also be a great opportunity for elementary age riders to experience the district format even if they aren’t yet old enough for state. Depending on size of show, the judge has time to do some teaching/comments at the end of the class. Reining, poles and barrels are also included in the classes but are available to junior and seniors only.

We are using this as a fundraiser, so there will be a one time charge of $5 and a $3 charge per class. Preregistration is not required. Riders must be in 4-H attire. Concessions will be available on-site.

Show flyer is available at http://lancaster.unl.edu/4h and the extension office. For more information, call Marty at 441-7180 or e-mail mcruickshank2@unl.edu

4-H Bicycle Safety Contest, June 27

This year’s 4-H Bicycle Safety Contest will be held before the county fair on Saturday, June 27, 9 a.m. at the Lancaster Extension Education Center. MUST preregister by June 23 by calling 441-7180 (there is no entry form). Late registrations not accepted. See Fair Book p. 34.

Wildlife Habitat Evaluation Program

The Wildlife Habitat Evaluation Program is a fun and challenging outdoor adventure where youth, ages 8-18, learn about wildlife, conservation and management. Junior (age 12-13) and senior (age 14-18) division teams (individual participation possible) compete at the state contest held June 5-6 at the Eastern Nebraska 4-H Center near Gretna. The novice group (ages 8-11) does not compete at the state contest, but learns about wildlife through fun educational activities and games.

Early bird registration is due May 1. For more information, go to http://fn.ohio.edu/whsp or contact Tracy at 441-7180.

Lancaster County 4-H’ers interested in becoming a Jr. Judge can take the JR. Judge training on size of the classes and show, if the judge has time to do some teaching/comments at the end of the class. Reining, poles and barrels are also included in the classes but are available to junior and seniors only.

We are using this as a fundraiser, so there will be a one time charge of $5 and a $3 charge per class. Preregistration is not required. Riders must be in 4-H attire. Concessions will be available on-site.

Show flyer is available at http://lancaster.unl.edu/4h and the extension office. For more information, call Marty at 441-7180 or e-mail mcruickshank2@unl.edu

4-H Riding Skills Level Testings, May 5 and June 23

A group level testing for 4-H Horse Advancement Levels will be held on Tuesday, May 5, 6:30 p.m. at the Lancaster County Event Center - Pavilion 2. Anyone wishing to be tested must sign up by April 28 by calling Marty at 441-7180 or e-mailing mcruickshank2@unl.edu.

Another testing will be Tuesday, June 23, 6:30 p.m. at the Lancaster Event Center - Pavilion 3. Deadline to sign up for this testing is June 16.

District- and State Entries Due, May 8

4-H district and state fair show entries are due to the Lancaster County extension office by May 8. No late entries will be accepted. Anyone planning on going to state must also have their horse ID’s and all parts of their horsemanship level requirements passed and SUBMITTED to the extension office. Entry forms, entry guidelines, entry procedures and the 2 8-3 year old western pleasure affidavits can be picked up at the extension office or online at http://animalscience.unl.edu/torse/horse.htm

Horse Identification Due June 1

For County Fair, 4-H Horse Identification Sheets are due to extension by June 1. Sketch markings showing both sides and face on the form are preferred instead of photos.
Four days of "hands on" workshops full of fun and learning! Youth attend as many workshops as they would like. Attending workshops that overlap the lunch period should bring a sack lunch. Food will not be available unless otherwise stated. If a workshop is already described, you have questions, contact Troy Kulm at 414-780-.
Two Outdoor Adventures Lead to Fun, Healthier Lifestyles!

Lincoln Safari — Find 30 Sites in Lincoln

Lincoln Safari will get families and other groups of people off the couch and into unstructured corners and hidden places within Lincoln thus encouraging a sense of exploration and discovery. Safari is free! For 2009, there are 30 safari sites in parks and outside spaces all around Lincoln. The challenge is to visit all 30 sites throughout the year and collect rubbings from all of them!

There is no cost to participate — the Safari is free! When a family or group registers, they will receive a FREE safari satchel which contains a map and a guidebook. The official Safari Map has all the safari locations marked and, in addition, the Safari Guidebook lists the sites and has clues to help you find the rubbing post at each site.

Many sites are accessible by city bus with a minimum of walking. Some are accessible from the hiker trails; some are right on our city streets. Groups are encouraged to walk, skip, bike, roller skate and skateboard to these locations.

Some sites will offer a surprise souvenir. The directions for collecting the souvenir, if there is one, are on the post. One souvenir will be given per family.

University of Nebraska–Lincoln Extension, UNL Institute of Agriculture and Natural Resources, and ten other community partners sponsor Lincoln Safari.

To Register

Anybody can register — families, one person, grandparents and grand-children, scout troops, maybe a group from your school or office.

Registration for the 2009 Lincoln Safari has begun. You may register until Nov. 1; but, if you wait, you’ll miss lots of fun events during the year. Lincoln Safari officially ends Dec. 1.

You may register online at http://lincolnsafari.org or at any Lincoln County Library or the Lincoln Park Nature Center. Just fill out the information and answer survey questions. You will then receive an official number for your “group” and a Safari satchel. If you register online, pick up your satchel at one of the following locations:

- Bennett Martin Public Library, 136 S. 14 St.
- Victor E. Anderson Branch, 3635 Touzalin Ave.
- Arnold Heights Branch, 3815 NW 54 St.
- Bethany Branch, 1810 N Cotner Blvd.
- Loren Corey Eiseley Branch, 1530 Superior
- Charles H. Gere Branch, 2400 S 56 St.
- South Branch, 2675 South St.
- Boss Dodson Walt Branch, 6701 S 14 St.
- Bookmobile
- Pioneers Park Nature Center, located at the west end of Pioneers Park
- Lincoln Children’s Zoo, 1222 S 27 St.

Groups which participated in the 2008 safari only need to take their book to the library to get their new kit — they will use their same number.

For more information, go to http://lincolnsafari.org, call 475-6741 or email info@lincolnsafari.org.

The Great Park Pursuit — Find 15 Sites Throughout Nebraska

After a successful inaugural year in 2008, the Great Park Pursuit will visit 15 more sites and outdoor adventures in May 2009. The Nebraska Recreation and Parks Commission partnered to develop the program with the goal of encouraging a healthier lifestyle for participants while increasing awareness of Nebraska’s nature rich outdoor recreation opportunities. This year’s program will be sponsored in part by the Department of Health and Human Services.

The program is adopted from a similar outdoor initia- tion started by the Connecticut Department of Environmental Protection.

Nature impressions are located on 15 Great Park Pursuit posts in parks throughout Nebraska. The challenge is to visit as many of the selected park sites as you can between May 1 and Sept. 8, 2009. Follow clues to find the posts and collect rubbings from the nature impressions.

Prizes and entry into drawings are based on the number of tracings collected. While participants become registered for a free two-night cabin stay at a Nebraska State Park of their choice with just one visit, the more sites participants visit the more opportuni-ties they have to win.

In 2008, the Tesarek family of Plattsmouth was one of 34 teams to visit all 10 selected parks. Participation in the Great Park Pursuit was a highlight of the family’s vacation. Karen Tesarek explained, “When we get back to the van, our 15-year-old, Andrea, said ‘Finding the places was the most fun part of the whole vacation.’ I thought that was really something because, in addition to doing the Great Park Pursuit, we had also taken them to the Black Hills, Wind Cave and Mount Rushmore, but she liked the Pursuit the best.”

Engaging youth in the natural world outside their door is an impor-tant component of the program. Of the 1,854 participants from last summer, 900 were children with an average age of eight. Since today’s recreation time is too often spent in front of a screen, The Great Park Pursuit provides an opportunity which allows participants to feel comfortable in natural environments.

To Register

Anyone can participate. Groups can be made up of individuals, families, friends, coworkers, youth organizations or any other group you belong to. There are four ways to register:

- on the Web at www.negpp.org
- at a kickoff/special event — a special event will be held at Pioneers Park in Lincoln on June 20 by calling 471-5424 and request a packet and registration form
- request in writing to Nebraska Game and Parks Commission, ATTN: Tim Montgomery, 2200 N. 33rd Street, Lincoln, NE 68503
- “Start your Journey today — Explore Nebraska Parks!” For more information, go to www.negpp.org or call 471-5424.

The Great Park Pursuit 2009 locations:

April
21 4-H Horse Level Testing, Lancaster Event Center, Pavilion 3 .......................... 6:30 p.m.
21 Guardian/Conservator Training ................................................................. 5:30–8:30 p.m.
25 Composting Demonstration, Pioneers Park Nature Center’s backyard composting demonstration area .......................... 10 a.m.

May
1 4-H Camp Scholarship Entries Due to Extension
5 4-H Council Meeting ................................................................. 7 p.m.
5 4-H Horse Level Testing, Lancaster Event Center, Pavilion 3 .......................... 6:30 p.m.
7 4-H/FFA Quality Assurance Training .......................................................... 6:30 p.m.
8 Extension Board Meeting ........................................................................ 8 a.m.
8 County Deadline for 4-H District/State Horse Show Entries, ID’s, Level Tests
12 4-H 2010 Citizenship Washington Focus (CFW) Meeting .................................................................................. 6:30 p.m.
14 Parents Forever/Kids Talk About Divorce ...................................................... 5:30–9:30 p.m.
16 Composting Demonstration, Pioneers Park Nature Center’s backyard composting demonstration area ........................................................................ 10 a.m.
19 Guardian/Conservator Training ...................................................................... 1:30–4:30 p.m.
19 4-H Hunter Horse Clinic, Lancaster Event Center ........................................... 6:30 p.m.
21 4-H/FFA Sheep Weigh-In, Lancaster Event Center - Pavilion 2 .......................... 6–8 p.m.
21 Bed Bugs: What You Need to Know ............................................................. 6:30–9:30 p.m.
28 4-H District Speech Contest, East Campus Union ............................................. 1–7 p.m.
30 4-H Life Challenge Contest-County-Level Senior Division, ................................ 9:30 a.m.

CLOVER COLLEGE REGISTRATION FORM

SEE PAGE 9 FOR CLOVER COLLEGE WORKSHOP INFORMATION

For current class availability, go to http://lancaster.unl.edu/4h/programs/clovercolleges

To register 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. Telephone registration not accepted. All fees are nonrefundable unless a class is filled to capacity or canceled. May photocopy this form if needed.

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

Registration opens April 23 for currently enrolled 4-H members.
Registration opens April 30 for non-4-H members.

4-H Spring Rabbit Show Recap

Nearly 35 4-H’ers exhibited approximately 150 total rabbits at the March 4-H Rabbit Show sponsored by the Lancaster County 4-H Rabbit VIPS Committee and UNL Extension in Lancaster County. This was a good chance for youth to practice showing their rabbits. Showmanship winners were: Junior – Ivy Dearmont Intermediate – Kalina Green Senior – Erin Dresser

More photos are online at http://lancaster.unl.edu/4h

4-H’ers Learn Beginning Sewing Skills

Fourteen 4-H members participated in the recent 4-H Jammie Jamboree. At this workshop, 4-H’ers learned beginning sewing skills as they completed a 4-H Clothing Level 1 project. As a bonus, they went home with pajama bottoms they sewed! More photos are online at http://lancaster.unl.edu/4h

UNL Lancaster County Extension, 444 Cherryreek Rd., Ste. A, Lincoln, NE 68528-1507

EARLY REGISTRATION NOT ACCEPTED!
Can You Guess It?

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

Did you guess it from the April Nebline?

Children looking at the mechanics of a combine at Ag Awareness Festival.

U.S. Drought Monitor Map
As of April 7, Lancaster County was not in drought conditions.

Ag Awareness Festival Teaches 4th Graders About Agriculture

Nearly 400 fourth graders from Lincoln area schools attended the Ag Awareness Festival held on April 8 and 9 at the Lancaster Event Center. Students gained a greater understanding of agriculture and how it impacts their daily lives. Students rotate between the following 10 interactive stations: Grain Products, Grain By-Products, Farming Technology, Swine, Horse, Dairy Production, Ruminant Nutrition, Dairy Calves, Beef Production and Hay & Forages.

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. This is the ninth year the festival has been held in Lincoln.

(Above right) “The Raptors” presentation by the World Bird Sanctuary included a bald eagle. (At right) UNL Extension Educator Barb Ogg and City of Lincoln wastewater treatment plant operator Tim Gulbrandson explain the biosolids recycling process.

3,000 5th Graders Attend 15th Annual earth wellness festival

Approximately 3,000 Lancaster County fifth graders from 42 schools attended the 15th anniversary earth wellness festival on March 30 and 31 at Southeast Community College. Students discovered and explored the relationships and interdependency of land, water, air and living resources through hands-on activities.

The festival is organized by 10 local agencies, including University of Nebraska–Lincoln Extension in Lancaster County. Classrooms attending the festival received pre-festival learning kits in October. A YouTube photo slideshow showing more scenes from this year’s festival is online at http://lancaster.unl.edu/ewf.

(Above right) Youth get a close look at a dairy calf in the Dairy Calves session and at a tractor in Farming Technology (right).

Watch Chicks Hatch Online with EGG Cam!
http://lancaster.unl.edu/4h/Embryology

Egg Cam will feature chickens and guinea fowl hatching through June!

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