Hello Master Gardeners!

It’s springtime!

Ok, so there have been a few days that felt like we skipped straight to summer, but I promise it is. I am sure all of you are getting outside doing what gardeners do best.

There are lots of things happening this year, and I hope you can take advantage of some of them: whether it be continuing educational classes taught here, or some of the different volunteer opportunities around the area.

A new crew of Master Gardener interns have started their training and will just be finishing training around the time this issue comes out. As you meet them in continuing education classes, or during volunteer activities, please help me welcome them into the fold.

I hope you enjoy this spring issue of Growing Up, and find some good information. Thanks to my contributors! If anyone has thoughts or ideas for articles in upcoming issues, please feel free to contact me.

-Natalia
Volunteer Opportunities, Continuing Education, and Just Plain Fun

Volunteers Needed:

Fremont Eco Fair
April 18
8:00 am-2:00 pm
Fremont, NE
402.727.2775

Spring Affair Plant Sale
Saturday, April 28
9:00 am-4:00 pm
Lancaster Event Center
Lincoln, NE
402.472.2971

Fremont 4-H Fair
July 11-14
Christensen Field
Fremont, NE
402.727.2775

Dodge County Fair
August 1-5
Scribner, NE
402.727.2775

The Fun Stuff:

Beginning and Master Beekeeping Workshops
Apr. 21, and June 28-30
http://entomology.unl.edu/beckpg/workshops2012.pdf
(continuing ed available)

Nebraska State Fair:
August 24-September 3
Grand Island, NE

TLC Country Floral
Spring Open House
May 4, 5, 6
1442 CR 18
Hooper, NE
402.654.2058

20th Annual NE Nebraska MG Plant Fair
May 4 and 5
Northeast Community College
Norfolk, NE
402.370.4040
(continuing ed available)

May Museum Plant Sale
May 5
9:00 am-12 noon
1643 North Nye
Fremont, NE

Spring into Spring Plant Sale
May 19, 20
Lauritzen Gardens
100 Bancroft St.
Omaha, NE
402.346.4002

Rose Show
June 10
Lauritzen Gardens
Omaha, NE

"Dan sculpted the shrubs to look like hunters to keep the deer from eating them."
Garden To-Do’s  By Rich Apking

It’s Spring!
(Just a little early)

1. Clear the area. If there’s sod in the area for your new bed, simply cut the grass or weeds to 1 inch high with your mower.

2. Define the bed. Using stakes and string mark the area of the bed (the width should be 4 feet or less, the distance you can easily reach from each side of the bed). If you are making several beds in an area, make paths 4 to 5 feet wide between the beds. That way when your plants spill out of the beds, you’ll still have room to walk.

3. Build the base layer. If your underlying soil is clay or drains poorly, put in a 6 inch layer of builder’s sand to promote drainage. If you happen to be blessed with good drainage, skip this step.

4. Add Topsoil. Add 6 to 8 inches of organic topsoil raking the soil for even coverage.

5. Mulch with compost. Topdress the beds with 1 to 2 inches of finished compost. This layer will suppress weeds, conserve moisture and slowly release nutrients.

6. Plant the beds. When you are ready to plant, scoop out a planting hole and add a blend of compost and soil. Place each plant so that the top of the root ball is even with the surface of the new soil, then fill the hole with more of the soil blend. The possible exception will be tomato plants which can be planted deeper to encourage large root systems. Water each plant well.

Even if your garden is several years old, chances are you’ll be building at least one new bed this season. Here are a few helpful tips that might save your back, and bring you some peace of mind.

If you’re like most gardeners, you’ll also visit your local garden center several times this month to pick up bedding plants, row covers, tomato stakes, and maybe a shrub or two. While there you will probably check out the bargain shelves. Before you put any nursery orphans in your cart, you should:

1. Avoid plants that are yellow or wilted.

2. Be sure the plants are labeled.

3. Examine the plants closely for insects (especially beneath the leaves).
Garden To-Do’s  By Rich Apking

4. Sniff the soil. If it smells bad, the plant roots may be rotting.

5. Never buy a sickly plant and expect to nurse it back to health.

6. Don’t buy a healthy looking plant that’s surrounded by sick plants. It probably has the same problem but isn’t showing it yet.

Most of all, you’ll be planting this month—not only your garden center goodies, but also all of those healthy organic seedlings you started a month or two ago. So, here’s a gardener’s “to-do” list.

1. Harden-off cabbage, broccoli, and cauliflower seedlings for a week before setting them out in the garden beneath covers or cloches.

2. Sow spinach, lettuce, and radishes. You can cover them with plastic tunnels to get them growing in a hurry.

3. Late this month, plant potatoes and peas, followed by carrots and any other greens.

4. Set out snapdragons, dianthus and pansies, and if needed plant new beds of asparagus and rhubarb.

5. Divide daylilies, phlox and other clumping perennials.

6. Add to established fruits (including raspberries) with a thin layer of compost.

7. Renew mulches as necessary, but always keep mulch 2-4” deep.

One last tip: Taking your soil’s temperature. The most accurate way to time planting is to use a soil or compost thermometer, like the one seen below. They are sold at most garden centers and hardware stores.

Take daily readings, starting at least 1 week before you expect to plant seeds outdoors. Brush away any surface litter or mulch and insert the thermometer to a depth of 3 inches. Every 5 days, add up your daily readings and divide by 5 to determine the average temperature. When the average soil temperature over a 5-day period reaches 45 to 60 degrees F, plant cool-season crops. Sow warm-weather seeds when the soil temperatures are between 65 and 89 degrees F. Wait until the soil is consistently between 75 and 90 degrees F before you plant hot-weather crops.

Well, there you have it. Consider this a start in beginning your garden for this year. Here’s hoping you have a great time, and grow a wonderful and bountiful garden in 2012!
Looking for a versatile plant? Try hydrangeas. They bloom in different colors, grow to varying heights, and are suited to different areas—roomy or small, shady or sunny, depending on the variety. Some have variegated leaves or leaves that turn color in fall. There is even a vining hydrangea that can climb 80 feet high.

Two new hydrangea cultivars for 2012 are You-Me Passion, a re-blooming variety, and Golden Crane, a fragrant early bloomer. The latter is recommended for zones 6-10 and would be chancy in Nebraska unless it’s placed in a sheltered, warmer area.

‘You-Me Passion’ looks like lace-cap type when first opening, with large flowers encircling the edge of the bloom, but the whole flower fills out with double blooms so it looks like a mophead. It’s a compact shrub with a strong, upright growth habit and rigid branches. It grows to about 4 feet tall and 3 feet wide and is recommended for zones 5-9. It might do okay in Nebraska especially if it’s in a sheltered area and is mulched heavily in the winter to prevent premature growth. Both of these are macrophylla hydrangeas. Many of this species have been bred to re-flower. Of these, Endless Summer Twist-n-Shout (zones 4-9) are probably the best known here, but there are at least ten other cultivars available, most hardy from zones 5-9.

Be patient if planting one of these. Sometimes it takes a few years for them to acclimate to their planting site.

The paniculata hydrangea is a cold-hearty variety and regularly grows in zones 4-7.

It has large creamy white flower clusters, or panicles, that are six to eight inches long. When mature they can turn a dusty rose pink.

On the northwest corner of the May Museum is a PeeGee paniculata that has been pruned into tree form. Check it out in the late summer. It’s gorgeous! The museum also has some re-blooming hydrangeas in the garden and south of the museum.
The Oakleaf hydrangea, (Hydrangea quercifolia) one of only two species native to the United States, is the one that gets mahogany red leaves in the fall.

On the northeast side of the student Union on East Campus at the University of Nebraska is a compact oak leaf hydrangea called a PeeWee. It is quite fragrant when blooming and has an interesting texture.

The other U.S. native species is the smooth hydrangea (hydrangea arborescens). The most common cultivar, Annabelle, has pure white blooms at its peak, which age to a pale green.

It is recommended for zones 4-9 so should survive here. In the late summer the green of the blooms can be especially eye-catching.

While the other hydrangeas are considered shrubs, ‘Annabelle’ and other smooth hydrangeas are best treated as herbaceous perennial plants. They should be cut down close to the ground each fall or very early spring. They grow back quickly.

All hydrangeas like moist, well-drained soil with high organic matter. They occasionally get powdery mildew, aphids, or mites, but these are easily controlled. All like some sun but many do well in shade, and most do better away from the hot west side of a house.

Mary Svoboda wrote an excellent article, “How to Grow and Care for Hydrangeas,” in the spring 2008 Master Gardener newsletter, which is well worth checking out.

Another good place to look for information is the U.S. National Arboretum website, www.usna.usda.gov/Gardens/faqs/hydrangeafaq2.html. It has pictures of each of these species of hydrangeas in color along with pictures and information on insect and mildew damage.
The Native Corner by Jenny Cich

Yucca wasn’t always so yucky!

Yucca glauca Nutt., commonly known as yucca, small soapweed, Spanish bayonet, or beargrass is a perennial shrub native to Nebraska that flowers in the summer on a raceme. A raceme is a single stalk with many flowers coming off the single stalk. In the case of Yucca glauca that could be 15-15 bell shaped flowers. Each single flower is greenish white and has 3 petals. This plant flowers only once a year. When growing in pastures, the flowers are eaten by livestock. American Indians ate the young flower stalks after boiling or roasting.

This shrub shows very little, if any, brown woody material because the stems are very short and covered with leaves. The leaves are erect, simple, linear blades. They are stiff and sharply pointed. New leaves emerge from the center of the plant.

White threads generally strip and curl from the margins of the leaves which makes the leaf tips even harder and sharper. These strong leaf threads were used by the American Indians to craft things used in daily use like rope, baskets and sandals. If the leaf thread was left attached to the sharp leaf tip the tip of the leaf could even be used as a needle!

One of the common names small soapweed is because the root of Yucca glauca was used in making soap by American Indians. This soap was said to be especially helpful in removing lice from hair.

This shrub is found most commonly in the dry soils of rangelands of the west, although it has been used as an ornamental in many residential landscaping plantings throughout the state.

The root system is a taproot with rhizomes. Yucca reproduces through ramets and seeds. Ramets are clones of the parent plant produced from the rhizomes or lateral buds.
Ok, so Dallas Johnson Greenhouse is a wholesale nursery, but there is a very good chance that you’ve bought their plants through other distributors. Plus, it was our first Master Gardener trip, and I would say it was both interesting and informative!

Dallas Johnson (yes, there really is a Mr. Dallas Johnson) started out working in the nursery industry in Red Oak, Iowa with his brother and father. Eventually Dallas ventured off to Council Bluffs to start his own nursery. Red Oak Greenhouse is still in business, and is also another wholesale company.

Dallas Johnson Greenhouse currently has over 60 acres of greenhouse space to grow bedding annuals, perennials, mums, and poinsettias. Right now is when annuals and perennials are really taking center stage, mums and fall plants come around July, and in August, more than 100,000 poinsettias are grown for the winter crop.

Dallas Johnson Greenhouse is located in Council Bluffs, just after you cross the Veteran’s Bridge in south Omaha. They deliver plants to customers in 12 different states in the Midwest. Wal-Mart is one of their most well known customers. In fact, if you are at a Wal-Mart greenhouse this spring, take a look at the plant container - my guess is it will say Dallas Johnson Greenhouse on it!
6 carts of newly potted plants on their way to the greenhouse.

DJG mixes their own potting soil mix. How much do you think they use?? A lot!

DJG does enough production to warrant automated seeders (rather than have people doing it by hand). The picture to the left is one of their automated tray pluggers at rest.
Powell Gardens is a botanic garden located ~ 30 miles east of Kansas City on over 900 acres of former farmland. More than 10 individual gardens have been created, the most recent one being the Heartland Harvest Garden (HHG). This garden is a 12 acre garden used to educate and promote plants suitable for Mid-west growing - row crops, vegetables, fruit trees, herbs, etc. This Heartland Harvest Garden opened to the public in June, 2009, and is the nation’s largest ‘edible landscape.’

Powell has many other ‘specialties’ such as the Living Wall. The Living Wall, which is over 600 feet long, is planted with various succulents and perennials. It is believed to be the longest living wall in the nation. Perennial gardens, waterfalls, and a great conservatory are just a few other things to make sure to see when visiting. There is always something going on, and lots of things blooming no matter what time of year you visit!
Lauritzen Gardens  
Omaha, NE  

May 21, 2012  
Leave the Dodge Co. Extension office at 8:00 am  

Tour the 100 acre botanic garden, and browse the plants for sale at their annual plant sale.  

*Time to shop will be provided!*  

Dallas Johnson Greenhouses  
Council Bluffs, IA  

March 21, 2012, noon sharp  
Leave from the Dodge Co. Extension office at 10:30  

Thanks for going ladies!!  

TLC Country Floral  
1442 Country Road 18  
Hooper, NE  

August 30, 2012  
Leave from the Dodge Co. Extension office at 4:45 pm  

We are getting a behind-the-scenes-look at production of fresh bedding plants and dried arrangements.  

* Time to shop will be provided! *  

OVERNIGHT Field Trip Option:  

Powell Gardens  
Kingsville, MO  
(900+ acre botanic garden)  
&  

Birds Botanicals  
Kansas City, MO  
(Orchid Specialist )  

June 15 and 16  

* This is a new date option!! Please let me know ASAP if it is a better than an October trip! *  

Trip Details:  
We will carpool to all locations, unless there is enough participants to warrant getting a van which I would arrange for.  

If there is enough interest in the overnight trip to Powell Gardens/Birds Botanicals trip, I would reserve and drive a van or bus. The only cost to a Master Gardener for this would be for a hotel room, which I would also reserve in advance. Please let me know as soon as possible if this is of interest. Spouses are welcome!
Fertilizing Plants—Betty Hamata

Just as we need nourishment from the foods we eat, the plants we grow also need food to grow and produce beautiful blooms and abundant vegetables.

Fertilizing plants with the right formulations and at the correct time will help our flowers and vegetables keep producing through the seasons. Fertilizers may be liquid or dry and may be formulated in many different ways.

A nitrogen shortage shows up as yellowing leaves and poor growth.

Only with phosphorus can plants create stiff stems to hold leaves and flowers up toward sunlight and the ever important pollination. A phosphorus shortage slows root growth, flowering, and seed production. Leaves lacking phosphorus turn purplish or become dark gray-green. Most soils contain plentiful potassium but in a form difficult for plants to use.

Potassium is necessary for photosynthesis in all plants, but also helps with the formation of bulbs and tubers. Symptoms of potassium shortage include mottled yellow or pale green mature leaves with scorched edges. Flower yield is also decreased.

Fertilizer labels also list trace elements of iron, calcium, magnesium, zinc, manganese, and sulfur. Of these secondary nutrients, iron is the one usually in shortest natural supply and causes yellowing of plant leaves such as pin oak that need regular iron treatments to maintain green leaves during the summer.

Before I plant flower seeds or started plants, I apply a slow release fertilizer (10-15-10) to the soil, and again about July 15th. To my container planters I apply the slow release fertilizer and then supplement with a liquid fertilizer every two weeks.

Newly planted trees and shrubs need fertilizer in spring only to make the most of growing time so when winter comes, the new growth has sufficient strength to withstand the cold. Mature trees, shrubs, and perennials benefit from a yearly fertilizer application in the spring.

Roses benefit from a fertilizer higher in phosphorus (8-12-8) with a systemic for insect and black spot in early spring, every other month, but stop fertilizing by August so roses can start to slow down before freezing.

Houseplants need monthly fertilizing from March through October, but no fertilizer during the winter as they are not actively growing. A nitrogen shortage shows up as yellowing leaves with poor growth.

The pH of soil reflects the concentration of hydrogen ions in it, which determines how acidic or alkaline the soil is. pH is measured on a scale from 0.0 to 14.0. A soil that measures a pH of 7.0 is neutral, neither acidic nor alkaline. A pH below 7 is considered acidic, and above is basic (or alkaline). Rhododendrons, azaleas, and hydrangeas prefer a slightly acidic soil. This can be accomplished by adding an acidic mulch of pine needles, or using aluminum sulfate. To correct an acidic soil to a more alkaline pH, add dolomitic limestone.

Fertilizer with a 12-3-10 make-up

The big three fertilizer elements are nitrogen, phosphorus, and potassium, also called potash (N-P-K). Nitrogen is a vital component of plant protein. Symptoms of nitrogen shortage include slow growth and yellowing leaves.

Too much nitrogen forces lush foliage as opposed to structural growth. The plant then becomes vulnerable to weather variables and attack by insects and disease.

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