

## Hello Master Gardeners!

After another cold winter in Nebraska we are all looking forward to the warmth and beauty that spring brings. Robins have returned, crocus, daffodils and tulips are breaking ground, and we can't wait to plant those first vegetable seeds.

April in Nebraska offers us so much beauty and we anticipate warm spring breezes. So visit your favorite garden centers, check out the new plant varieties, enjoy a garden walk and get in your volunteer hours.



—Betty Hamata

## Mulches Beneficial to Landscapes If Applied Correctly

*By Roch Gaussion, UNL Turfgrass Specialist*

Mulch, an organic or inorganic material applied on the surface of soil, benefits landscapes in a variety of ways.

Ideally, it must allow water and air to enter and exit the soil. Mulch also can insulate a plant and its roots from the effects of extreme temperature fluctuations. Mulch should be attractive, relatively odor free and should stay in place.

Mulch can benefit soils by:

- reducing the amount of water lost from evaporation.
- protecting trees and other landscape plants from mechanical injury due to mowers and string trimmers.

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*Please Join Us!*

**Newsletter Committee**

**Meeting**

**May 13th**

7:00-8:00 pm

UNL Extension Office

1206 W. 23rd Street

Fremont, NE.

Join us to brainstorm newsletter article ideas for our June/July issue of the Going & Growing Newsletter. 2008 meeting dates: 7/22, 10/21

# From The Garden To The Table

## Borage

By Bonnie Parrish

Borage, *Borago officinalis*, is a gangly plant that grows up to about 2 1/2 feet high and about 2 feet wide. It sounds and looks like an unattractive weed, until the flowers appear. The heat of summer brings out the bright blue, star-shaped flowers, and are what the plant is known for.

The leaves of the borage plant resemble the flavor of cucumber. All parts of the plant are edible, although the leaves have thistly hairs, and are seldom used.

The leaves can be cooked with cabbage leaves, two parts cabbage and one part borage.

Adventurous chefs have known to use blanched leaves in salads as a substitute for spinach.

Chinese chefs have been known to use the leaves much as others use

grape leaves; stuffed and rolled. Germans add the leaves to stews and bouillons.



Bright blue, star-shaped flowers make borage a very ornamental herb.

Borage is not a fussy plant, but the richer the soil, the bushier the plant will be. Borage prefers full sun and should be protected from wind, as it easily blows over. Once growth is established, it will continue to seed itself. Planted close together, borage plants will support each other.

Borage is an excellent companion plant for tomatoes, squash, and strawberries. The plant actually improves the flavor of tomatoes growing nearby.

To use the fresh flowers, remove the thorny backside. Be careful when picking the flowers: bees and other beneficial insects are attracted to the hanging blossoms and are often hidden from view when gathering nectar.

Rinse the flower gently and pat them dry. They hold up well when refriger-

ated between two pieces of damp toweling.

Use as a garnish, tossed in a salad of baby greens and edible flowers crystallized for cakes and pastries, or frozen in ice cubes as a whimsical and eye-catching addition to beverages.

When adding to a salad be sure to add them at the last minute, as dressing will cause them to wilt and vinegar will discolor the beautiful blue color.

Borage has also been found to contain a compound which helps relieve inflammatory conditions such as eczema when applied topically. It also reportedly balances the function of the adrenal gland, and is especially helpful following surgery. Borage is rich in minerals, especially potassium and a tea made with borage helps to reduce fevers and ease chest colds.

### Varieties

- *Borago officinalis*—most common variety with blue flowers
- *B. officinalis* ‘Alba’—white flowers
- *B. officinalis* ‘Variegata’—yellowy mottled leaves and blue flowers

### Going & Growing Newsletter Contributors:

Roch Gausson  
Betty Hamata  
Sarah Browning  
Rich Apking  
Lorraine Urban  
Bonnie Parrish

## “The Gin And Tonic Gardener” by Janice Wells

Book reviews  
by Lorraine Urban

“The Gin And Tonic Gardener,” is about gardening but also about attitude. The author Janice Wells is one of our Canadian neighbors, but you’ll still recognize most of the plants she mentions.



Her writing style is casual and amusing. Some of you will also relate to her “attitude.” The book is divided into 51 very short chapters about her gardening in Newfoundland and Nova Scotia, each chapter standing alone as far as subject and continuity go. So, you can pick it up and put it down as suits you. I found it hard to put down.

Ms. Wells hits home with many of us when she writes in Chapter 17, after deciding that she should buy some wild thyme, *Thymus serpyllum*, “I bought two packs at \$4.99 each, expensive seeds and twice as many as I need, just in case it’s only half as good as it sounds and doesn’t germinate profusely. It’s that kind of logic and optimism that sustains me as a gardener.

“Sometimes of course, stronger sustenance is called for, hence the name of this book.”

## “The Truth About Garden Remedies”

“The Truth About Garden Remedies (What Works, What Doesn’t, and Why)” is another book that ought to be on every gardener’s reference shelf. Jeff Gillman, Ph.D. is an associate professor at the University of Minnesota – Department of Horticultural Science. He has spent a great deal of time researching the garden guru remedies that we read and hear about from friends.

What if music can affect your plants? Is it a positive or a negative effect? Whose DVDs should you run out and buy? Biostimulants, dish soup, nematodes, silicon and horsetail soup...which ones work? Do any of them work? Some of them do, not always in the way you would expect! It’s all there, the things you’ve heard of and the things you haven’t.

Each chapter identifies the “remedies,” the ways in which they are used, the reasons behind them, and how a gardener should or shouldn’t use them. It’s very easy to find whichever remedy you want to research by using the Table of Contents in the front of the book and the Index in the back.

The information acquired from Mr. Gillman’s research is certainly scientific, but also very readable and, for those of us who are not scientists, understandable.

My copy is “soft cover” and it cost about \$20.

### Red, White and Blue Salad

3/4 cup sour cream  
1/4 tsp. coarse black pepper  
1 tsp. white sugar  
1 tsp. fresh chopped dill  
1/8 tsp. grated lemon peel  
1 Tbsp. rice wine vinegar  
1/4 tsp. finely grated red onion  
Salt  
1 English cucumber  
3 garden fresh red tomatoes  
10 borage flowers

Combine all the ingredients except for the tomatoes and flowers.

Slice tomatoes and arrange them, overlapping, around the edge of a serving platter. Mound the cucumber mixture in the center of the platter, just covering the inner edge of the tomatoes.

Chill well and place the borage flowers decoratively on the salad just before serving.

Makes 4-6 servings.

# Perennial Geraniums

By Rich Apking

The hardy geraniums, also commonly known as Cranesbill, is one of my favorite plants for good reason. Not only is it attractive, both in and out of bloom, but it is also nearly indestructible. Although this winter did set back some of my less robust perennials, my little cranesbill patch is showing signs of green. I think it finds the cold stimulating.

Several species of hardy geraniums are available to gardeners. Two of the most common are Meadow Cranesbill, *G. pratense*, and Bloody Cranesbill, *G. sanguineum*. There are also several great hybrids available such as 'Johnson's Blue'. In 2008, the Perennial Plant Association has named a new perennial geranium 'Rozanne' as plant of the year.

These are not, of course, the annual bedding plants that many people know as geraniums. Although distantly related, the annuals actually belong to the genus *Pelargonium*.

The upper petals of *Pelargonium* flowers tend to be a different shape than their lower, but the five petals on true geranium flowers are all the same pattern. And while species of perennial geraniums grow in some of the most frigid parts of the world, *Pelargoniums* originally came from South Africa and must be more tenderly treated.

Geranium comes from the Greek geranō (a crane) because the seed is, as John Gerard says, "set together like the head and bill of a bird."

Some misguided folks have described the geranium as, "warmly and pleasantly scented." The leaves of most hardy geraniums are most generously

## 'Rozanne' 2008 Plant of the Year

The Perennial Plant Association has awarded the title of the Perennial Plant of the year to Geranium 'Rozanne'. Donald and Rozanne Waterer discovered this strong performing hardy geranium in their garden in Somerset, England in 1989. It has 2 1/2 inch, iridescent violet-blue, saucer-shaped flowers with purple-violet veins and radiant white centers.



- Hardiness— Zone 5 to 8
- Size— 20 to 24 inches tall, slightly greater width
- Light— Best in full sun to partial shade. Afternoon shade is advisable in hot climates.
- Soil— Prefers moist, well-drained soil.

Use as a beautiful ground cover or as an attractive specimen plant. Non-stop flowering through the growing season.

termed "musty", and many plant's fragrance is, "most unendurable, for when bruised or broken it fills the world with a nasty odor which clings to clothing for a long time."

Even so, I allow the ferny-foliaged plants to stay because they are so pretty when in bloom, and the deep green foliage is very striking, often turning reddish in fall. Since the plant continues to produce new leaves and a few blossoms throughout the summer, it is always changing.

An easier and more accommodating plant I couldn't imagine. Flowering for long periods and often twice in one season, if cut back at the right time. They come in a wide color range from white, pink, and blue through to purple, and in a wide variety of foliage too.

Some like shady places, others enjoy sunny, hot spots, and many can be grown quite successfully in pots. They are reliable, easy to cultivate, requiring little upkeep, and on the whole trouble free. Their use in the garden is almost limitless, blending well with other plants. They also propagate easily by division in the spring, so you can spread them around the garden, or to give to gardening friends.

So if I've piqued your interest, here's a quick primer on how to grow perennial geraniums:

### Choosing Plants

- Look for plants at nurseries in spring and summer, in 4 inch to 1 gallon containers.
- Choose healthy looking plants with signs of new growth in leaves and flower buds.

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## 2008 Midwest Regional Master Gardener Conference

*"Gardening through the Continuum of Life"*

July 16 -19, 2008

Four Points Wyndham  
Airport Hotel & Convention Center  
Milwaukee, Wisconsin

Begin your conference weekend by choosing one of six fantastic motor coach tours to private gardens in the area. All tours include lunch in the air-conditioned comfort of a local restaurant and fabulous shopping opportunities at a fine garden center

The conference will kick off on **Wednesday** evening, with a get together meal and social/networking event for those who have come in advance for the Thursday tours. This will also be the start of our ongoing registration/check-in for the conference.

**Thursday** tours provide your choice of one of six fantastic motor coach tours of private gardens in the area. This will include lunch in the comfort of an air-conditioned local restaurant and the always popular stop at a great garden center. This provides the start of a perfect introduction to "Gardening through the Continuum of Life".

The culmination of Thursday's program will be an informal dinner/socialization event around the pool after the tours.

**Friday's** educational sessions begin with a presentation by **Gene Rothert**, enabling garden author, educator and manager of Chicago Botanical Gardens' Buehler Enabling Garden & Horticulture Therapy Services.

The presentation will be followed by four one hour breakout educational sessions, with eight different topics in each one

hour block. Ongoing, during the day and evening, will be a vendor's area, Master Gardener's displays and a silent auction.

**Friday** evening will be the main keynote speaker and dinner with **Michael Weishan** of the PBS Victory Garden, followed by a social/ hospitality reception.

**Saturday** morning, features the entertaining **Melinda Myers**, author and host of Public Television's Great Lakes Gardener. After Melinda's presentation, it is 'Hand's On Day', with many different opportunities to try something new.

Call Doris Fons for a registration packet- (414) 425-6072

Or contact Susan Mahr  
(608) 265-4504

[semahr@facstaff.wiscu.edu](mailto:semahr@facstaff.wiscu.edu)

## 2009 International Master Gardener Conference

*"New Frontiers in Horticulture and Gardening"*

March 22-26, 2008  
Alexis Park Resort  
Las Vegas, Nevada

Official website of the 2009 International Master Gardener Conference:  
<http://www.unce.unr.edu/imgc/>

On-line registration and hotel reservations can be made during the summer of 2008.

Our host hotel, the **Alexis Park**, is the **premiere, all-suite, non-gaming resort** in Las Vegas. Beautifully landscaped grounds, three sparkling pools and finely appointed guest suites ensure a relaxing retreat. It's just minutes from the exciting Las Vegas Strip, where you can enjoy world-class cuisine, fantastic shopping,

renowned golf courses and spectacular entertainment.

But we're not just neon lights. Experience the "**unexpected**" **side of Vegas** — our exotic desert landscapes, historic sites, Master Gardener projects, and behind the scenes gardening at exclusive hotels.

Explore "**New Frontiers**" in **horticulture and gardening** — learn what is new and exciting in plant material and equipment, energy efficient practices, environmentally sensitive design, gardening for health, and more!

The Las Vegas **International Master Gardener Conference** will address issues that gardeners everywhere face -- water conservation, proper plant selection, soil enrichment, pest control -- while also presenting new concepts in environmental stewardship and "green" technolo-

gies. Since what is old has become new again, we will also explore historical and traditional plants and methods.

**Workshop Topics:** Green Technologies, Water Conservation, Heirloom Plants, LEED, Healthy Gardening, Native Seeds, Farm to Restaurant, Ancestors' Gardens, Trees for Tomorrow, Artful Gardening, Water Harvesting, Soil Microbes, Interactive Learning.

**Tours:** Hoover Dam, Grand Canyon, LV Springs Preserve, Ethyl M Cactus Garden and Living Machine, Red Rock Canyon, Spring Mountain Ranch, Desert Rose Garden, China Ranch Date Farm, Gardens at the Bellagio and Wynn resorts.

Contact:

Ann Edmunds, Program Coordinator  
edmundsa@unce.unr.edu  
702-257-5587

## 2008 Master Gardener Volunteer Activities

### Phone Answering

Volunteers are needed to help answer phones any weekday from 9 a.m.-Noon, or 12:30-4:30 p.m. You don't need to come for the entire morning or afternoon, but can pick the hours that work best for you. Dates from May 1st through August 31st are available. Please call Sarah at 727-2775 to sign up! You'll learn lots!

### UNL Extension- Dodge County Workdays

Help put our summer containers to bed for the winter and maybe prune some shrubs. A work day is scheduled for:

- Fall- **(Tentative)** Friday, October 24th, 10:00-Noon. We'll be putting the containers to bed for the winter, trimming shrubs.

### Fremont Community Gardens

A work day is scheduled for:

- Fall- **(Tentative)** Friday, October, 24, 10:00-Noon Help prepare Fremont's community gardens for fall tilling.

### Washington County Extension Office

The UNL Extension Office in Washington County will soon be moving to a new home. Master Gardeners will be needed to help install the new landscape and to maintain the plantings throughout the summer by watering, fertilizing, weeding, etc.

### Washington County Fairgrounds

Work with Doug Wolfe, (402) 478-4395, to maintain the new tree plantings on the fairgrounds- watering, mulching, etc.

### Blair Community Gardens

Work with Doug Wolfe, (402) 478-4395, to establish a new flower bed at each of Blair's two nursing homes, including soil preparation, plant installation, watering, fertilization and weeding throughout the summer.

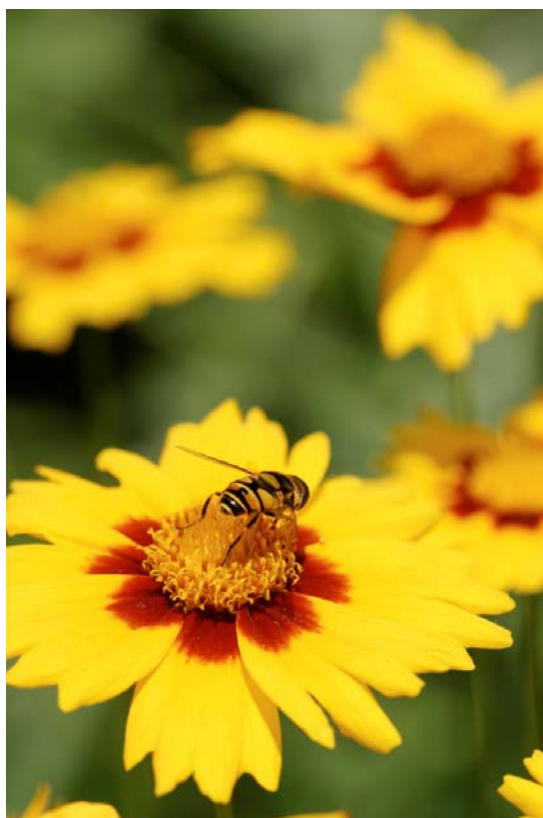
### Newsletter Committee

Become a member of the newsletter committee. The committee meets 4 times per year to brainstorm content for the next newsletters. If you need help choosing a topic we will help you and get you writing! New contributors are always welcome!

Meetings will be held at the UNL Extension office, Fremont on May 13, July 22 and October 21 from 7-8 p.m. This activity will be worth 2 hours of volunteer time per article, and one hour for each meeting attended.

### Educational Displays

Take pictures and help assemble a new informational display addressing the benefits of trees. We'll need great pictures and text to discuss why trees are beneficial. We'll be using this display at the 2009 EcoFair.



**Contact Sarah to sign up for any activities you would like to participate in this year.**

**Email: [sbrowning2@unl.edu](mailto:sbrowning2@unl.edu)**

**Phone: (402) 727-2775**

## Programs for Additional Education Hours

Join us for this series of free, horticulture seminars for gardeners of all ages and Master Gardeners.

### Nebraska Statewide Arboretum Spring Workshops

May 8th

#### Landscape 101 Workshop I

6:30-8:30 pm Location: TBA \$35/\$40

Have you always wanted to do something different with your yard? New to home owning? Overwhelmed by yard work? This workshop will take the fear out of plants and their management. This session will cover basic sustainable landscape design and management principles.

May 15th

#### Landscape 101 Workshop II

6:30-8:30pm Location: TBA \$35/\$40

Planting the right plant in the right place can save time, money and headaches! This workshop will dive further into design, management and plant selection and highlight some of the best plants for Nebraska! We will also talk about finding plants and proper planting techniques. Appropriate for new home owners, novice gardeners or experienced "yard-ers"!

May 10th

#### Go Native...Nebraska Style

9:30-11:30am Location: TBA \$35/\$40

For the last 30 years the Nebraska Statewide Arboretum has been promoting "Nebraska Style Landscaping" which features native, water-wise plants. Learn how to incorporate native prairie plants into your landscape in design, planting and management. This workshop will be held in NSA's beautiful test gardens. Come ready to walk and be outside!

June 26th

#### Urban Habitat Oasis

7:00-8:30pm Location: TBA \$25/\$30

Critical habitat for birds and pollinators is decreasing and our landscapes are increasingly sterile. Find

out how you can play an important role through creating wildlife friendly landscapes—even in the city! Be prepared to go outside.

**Registration:** Pre-registration is required for all workshops. Payment by check or credit card is due at the time of registration. Registrations will be accepted by mail or phone up to 6 business days before the class.

**Insufficient Registrants:** NSA reserves the right to cancel classes 3-5 business days before the class date due to insufficient registrants. Participants will be notified by e-mail or phone.

**Inclement weather:** NSA reserves the right to cancel or reschedule the classes due to inclement weather.

**Refunds:** A full refund, made by check, will be made automatically for canceled classes. Refunds will only be granted to participants requesting a refund prior to the start date of the class. A \$5 service fee will be withheld from the refund. Refunds will be made in credit towards other NSA educational offerings or by check.

**Location/Parking:** All classes will be held at UNL. Class locations to be announced. Parking in UNL lots is available at the cost of \$6 per session upon request. Metered Parking and off campus parking is also available. We encourage participants to walk, ride bikes and carpool!

For More Information  
Visit: [arboretum.unl.edu](http://arboretum.unl.edu)  
Or call: (402) 472-2971



University of Nebraska- Lincoln Extension educational programs abide with the nondiscrimination policies of the University of Nebraska-Lincoln and the United States Department of Agriculture.

## Nursery Notes

By Lorraine Urban

Few things give most Master Gardeners as much pleasure as checking out a new nursery. Here's one I learned about from some members of my water aerobics class.

**From The Ground Up** is located on 7 ½ acres between Ceresco and Lincoln and owned by Mark & Joni Christensen. It is mostly Joni's project, but Mark and their 2 children help, too. The Christensen family began selling garden produce at the Farmer's Market in Lincoln 13 years ago.

A few years later they added a greenhouse and bedding plants. This will be the 8th year they've

been selling perennials, and annuals from their home site as well as at the Farmer's Market.

Joni grows most of the annuals and some of the perennials herself from seed. She does get some plug material from commercial growers. Her aim is to produce and sell high quality plants for reasonable prices.

In addition to the annuals and perennials, From The Ground Up has a number of shrubs for sale, and hanging baskets. There are LOTS of hanging baskets and already-planted pots full of flowers that may be purchased, or you may have Joni custom-plant your pots and baskets.

The nursery will open this year on April 19th and will stay open until the plants are all gone...usually by the middle of June. You may shop there Thursday through Saturday, 10:00 a.m. – 6:00 p.m., or on Sunday from 2:00 – 6:00 p.m. If you are unable to come during those hours, call the nursery (402-785-2213) and arrange a time.

From The Ground Up is located at 84th & Davey Rd. Go south of Ceresco on Highway #77, At Davey Rd. turn left (east) and go 2 miles. It's right there. If you're coming from Lincoln, Davey Rd. is 6 miles north. There will be a big sign posted on Highway #77 prior to the opening date to make sure you don't miss your turn.

## Mulches Beneficial to Landscapes If Applied Correctly

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- protecting exposed roots from lawn mowers.
- reducing soil compaction caused by people and equipment by diverting traffic around landscape beds.
- reducing soil and wind erosion, especially on steep slopes.
- reducing incidence of disease by protecting above-ground plant parts from splashes that carry soil-borne inoculum.
- reducing fruit rot by eliminating contact between fruit and soil.
- reducing winter injury by minimizing temperature variation

- helping control weeds
- maintaining cooler soil temperatures during the summer

The depth of mulch depends on the type of soil, plants and mulch used. Layers thinner than recommended depths may need to be replenished more often and may not give the desired benefits. Thicker layers may reduce the amount of oxygen in the soil and encourage plants to root in the mulch layer rather than in the soil. Thick layers may also shed water and prevent it from moving into the soil.

During wet periods, avoid thick layers of mulch around plants in heavy soils such as clays and clay loams.

Thick layers may reduce soil oxygen and injure plants. When conditions are cool and wet, mulch should be pulled away from plants to ensure good air and water exchange.

Never apply mulches against the bark of woody trees or shrubs. This may encourage insect and disease problems to occur on thin-barked and wounded trees. It also may provide protected chewing access for small rodents and other animals, which can severely injure the bark and cambium.

Organic mulches usually are replenished in the spring. A quick raking of the existing mulch will help deter-

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# Design On A Dime– In The Garden

By Betty Hamata

Have you wandered through high end garden centers or browsed through garden catalogs and found that perfect object for your garden, only to look at the price tag and keep walking? There is a solution!

Hunt the flea markets or thrift stores and you might find something similar there. Better yet use items that we all have or 'recycle' them to use out in the garden.

For instance, old farm machinery can be recycled– that rusted look is all the rage! Old tractor seats can be welded to a frame to make a great seating area or potted plant holder.

Rotary hoe tines can be welded into interesting flowers that don't need water.

An old manure spreader or wagon can make an interesting planting area. Old cream cans make great pot holders. Old tractor or wagon tires make great planters, and old tanks or bathtubs that don't leak can make a great water garden.

Interesting, old house railings can make a great trellis, or use a broken, old outdoor umbrella into a blooming tree. Just remove the fabric covering to expose the spokes, place it into the ground firmly and plant annual vines around it.

Used wine bottles, especially the colored ones with deep wells, turned upside down make great watering stations for butterflies. Place them at

different heights for more visual interest in the garden.

Try using two clay pots and a large clay saucer into a birdbath. Turn the first clay pot turned upside down as a base and top it with the second clay pot on top. Finish off with the clay saucer and fill it with water.

Here's a few more ideas:

- Old bowling balls make good orbs and an old car spring makes a great pedestal.
- Old clay drainage tiles make great planters when sunk in the ground.
- An old, rusty child's wagon makes a great movable planter. Or try using old metal baskets, wood crates or even a ceramic sink or bathtub. Filled with plants spilling down the sides they serve as a unique container.
- A broken birdbath that doesn't hold water can also make a great planter– especially for succulents that need good drainage.
- Two inch thick slices cut from tree trunks used in a bed of mulch make great stepping stones.
- Placing rocks among plantings creates interest and especially in winter can add architectural interest.

- Adding mirrors can create depth, catch light and movement and add interest to any space.
- Croquet or golf clubs buried halfway in the ground make great hose guides around flower beds.



An old washtub makes an interesting planter and a great conversation piece.

- Lightning rods from old houses or barns make great ornaments in flower gardens. I saw these in Richard Langemeier's garden!

I also saw an old outhouse repainted and used as tool storage in a garden in North Bend and an old pair of overalls were used to hold garden tools.

So remember, another's trash can become your treasure! Use your imagination and create your own garden treasures.

# Types of Mulch Have Different Advantages

By Roch Gaussion, UNL Turfgrass Specialist

Mulch comes in two varieties, organic and inorganic, and it is important to know the advantages and disadvantages of each one.

Organic mulches are derived from plants or animals. They break down over time, add organic matter to soil and improve soil structure. In sandy soils, they may increase water-holding capacity. In clay soils they can improve water drainage.

Organic mulches may be incorporated into the soil when beds are renovated or removed, but nitrogen may need to be added to the soil to prevent nitrogen deficiency in surrounding plants.

Some consumers don't like organic mulches because of their tendency to move out of landscape beds during heavy rainfalls or gusty winds. Watering organic mulches after installation will increase their ability to hold together and minimize movement.

Inorganic mulches are materials that come from nonliving sources. They rarely break down or they break down slowly. Because inorganic mulches don't break down quickly, they only need to be replenished when they are worked into the soil or are moved off site.

Inorganic mulches are difficult to remove when beds are planted, renovated or eliminated. Many consumers prefer inorganic mulches because of their longevity; however, inorganic mulches will increase reflexive heat and soil temperatures. As a result, landscapes may be uncomfortable to be in or view on sunny days, and in-

creased temperatures may damage plants.

For good plant health, organic mulches are generally preferred.

## Organic mulch types include:

**Straw** is used primarily in strawberry plantings or vegetable gardens, or for short-term landscape projects, such as seeding turfgrass areas, where it decompose quickly. Suitable materials include wheat, oak and soybean straw. Choose clean straw free of weed seeds to avoid weed problems in the landscape. Straw also may provide a winter habitat for mice and other rodents, so avoid using straw around trees and shrubs.

**Woodchips** can come from branches, bark or recycled wood pallets. Fresh woodchips may contain seeds of trees that can become a weed problem in landscape beds. Free woodchips are available from many cities. Dyes are available to color woodchips any desirable color. Woodchips may create access for an existing termite population if woodchips are placed against a foundation. Cedar and cypress are the slowest types to decompose.

**Corn cobs** – Chopped corn cobs generally are weed free, lightweight and easy to handle. They decompose slowly and can be used around perennials, trees and shrubs. They can be dyed various colors to match other landscape features.

**Grass Clippings** typically are used in perennial and vegetable gardens. Only clippings from a well-maintained turf should be used. Clippings from turfs that have a lot of weeds will contain weed seeds and may cause future weed problems.

Grass clippings should be dried before use. Fresh grass clippings are high in water and nitrogen and will readily ferment. The heat and ammonia released from fermentation can damage plants.

**Leaves** are readily available. They should be shredded and partially decomposed before placed around plants. As with grass clippings, thick layers of leaves may interfere with water and air movement.

**Pine Needles** are attractive and add fragrance to a landscape. They decompose slowly and therefore do not change soil pH quickly. Thick layers may mat down. Bales of pine needles are becoming more readily available.

**Sawdust** is readily available but does not make a good landscape mulch. It breaks down slowly and will pull nitrogen from the soil. This may result in nitrogen deficiencies for surrounding plants.

**Cocoa bean hulls** are a by-product of chocolate production. They are light, easy to handle, and have an attractive brown color. They also have a delightful aroma. (Unfortunately for chocolate lovers, the aroma lasts for only a few days.) They are somewhat expensive, but a mulch depth of 1 to 2 inches is sufficient. Cocoa-bean hulls are excellent mulches for annuals, perennials, and roses. They generally last only one growing season.

**Newspapers**- Shredded newspapers or whole sheets may be used in the vegetable garden. Most newspapers use organic inks so gardeners need not worry about lead contamination. When using newspaper sheets, place

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## Types of Mulch Have Different Advantages

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a layer of 6 to 8 sheets between plant rows in the garden. Water the sheets so they stick to one another and to the soil surface, then weigh them down with soil to prevent them from blowing away in the wind.

### **Inorganic mulch types include:**

**Plastic** -is available in different thicknesses and colors. Plastics may be used early in the season to increase soil temperatures and extend the growing season or to help ripen fruit.

Plastic is not recommended in landscape beds. It inhibits weed growth but will also inhibit the growth of desirable plants. Plastic restricts air movement, water and nutrients to and from the soil, affecting surrounding plant health.

**Landscape fabrics** typically are a black, woven fabric that contains small holes in the surface to allow air, water and nutrients to move to and from the soil. They are not aesthetically pleasing by themselves and typically are used with inorganic rock mulches placed on top.

Landscape fabrics should not be used underneath organic mulches, because it eliminates their soil amendment benefits and can leave organic mulches prone to washing off the landscape area in the event of heavy rain events.

While they are purported to inhibit weed infestation, many species, such as nutsedge and field bindweed, can grow through the fabric. Seed deposited on the surface also may still germinate. Landscape fabrics are more suitable for inorganic mulches than organic types.

**Crumb Rubber** is a product primarily generated from recycled car tires. It's typically used on recreational areas subjected to high traffic such as a cart path or playground. In high traffic areas, it helps reduce soil compaction, improves wear tolerance and provides padding for those using the turf.

Its use as a landscape mulch is limited and not recommended. Research shows that ground rubber can leach minerals, including zinc, aluminum, cadmium and chromium. Leachates

from rubber tires can kill entire aquatic communities, and at lower concentrations cause reproductive problems and pre-cancerous lesions in aquatic life. It is also less effective in weed control than organic mulches. Ground rubber is more likely to ignite than other mulches and is difficult to extinguish.

**Rock mulches** (Lava, River, White, Pink) -increase temperatures around plants, resulting in increased plant stress and greater vulnerability to insect and disease problems. Rock mulches also may increase the temperatures in outdoor living areas, the cost of air conditioning within adjacent buildings and glare if mulch is light-colored. Using rocks also can be dangerous because mowers and children can throw them.

Rock mulches are a good choice under down spouts or in dry bed streams to help slow water down and reduce soil erosion and the washing of organic mulches into turfgrass areas. In areas where rock is used, select a color that matches other elements of the house or hardscape.

## Mulches Beneficial To Landscapes If Applied Correctly

*(Continued from page 8)*

mine how much mulch should be added. Raking also will break up water-shedding layers.

Some plants, such as cool-season vegetables, benefit from early mulch and will produce later into the season if kept cooler. However, most plants benefit from waiting to apply new mulch until soil temperatures have warmed up. Prior to mulching, beds should be well watered if needed.

Late-season organic mulches are applied after at least two hard freezes. Applying mulch earlier will insulate the soil and keep plants from hardening off. Late-season mulching is especially important for recently installed plants to prevent frost heaving, the freezing and thawing action of the soil that may push plants out of the ground.

Herbicides can be used in conjunction with mulches to improve weed

control. Some herbicides may stain mulches and hardscape features, so use caution when using herbicides in landscape beds where annuals or new plants are being established. Some herbicides may stunt root development if applied before transplants become established.

Mulches are an important component of the landscape. When applied appropriately, they serve many positive functions.

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## Perennial Geraniums, continued

*(Continued from page 4)*

### Planting

- Plant in full sun with well drained soil in the front of a garden border, in a rockery or at the edge of a path.
- Place the plants no deeper than they were growing in the containers.
- Set the plants 6 to 12 inches apart.
- Apply 3 inches of mulch around, but not on top of the plants.
- Water well until the soil is completely moist.

### Maintenance

- Trim away any remaining dead foliage in late winter using bypass pruners or scissors.
- Topdress with a light fertilizer application in early spring. Be sure to follow the package instructions carefully.
- Apply 3 inches of mulch around, but not on top of the plants.
- Apply 1 inch of water weekly throughout summers when conditions are dry.

I really hope you'll try this really amazing plant. It is such a gardening bargain, something that will grow almost in spite of you, and continues to give great dividends for years and years.

*You can always view the*  
**Going & Growing Newsletter**

*online and in color at*  
[http://extensionhorticulture.unl.edu/MG/  
MGresources.shtml](http://extensionhorticulture.unl.edu/MG/MGresources.shtml)

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