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Kalamazoo Master Gardener Program Running Smoothly *by Emelee Reifschneider*

We certainly have had some nice warm days in October. I am doing the final cleanup at my gardens (the ones left behind at my childhood home) and also greenhouse. The fall colors this year were spectacular.

I want to thank all of you for your continued patience while the Master Gardener Volunteer database is being upgraded. I keep reminding myself that all counties in the state are in the same "shoes" we are.

Hopefully by the end of November, they will have all the kinks worked out. I have worked on this web-based system and it is really much better than the old system.

The Master Gardener office mailed a Confirmation of Hours Report for the 2003 reporting year (October 1, 2002 to September 30, 2003).

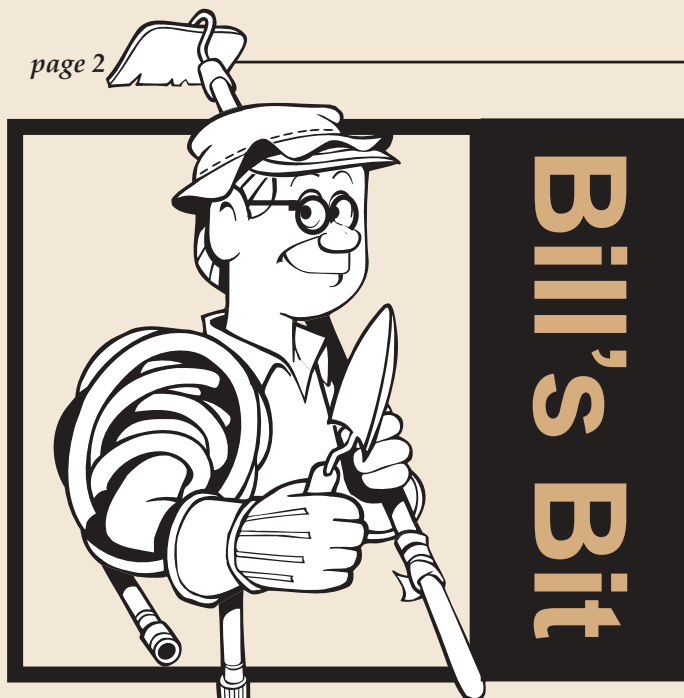
If you have report forms that you need to send in, please do so by December 1, 2003. After that deadline, we will be mailing out notices to those that have not certified or recertified. Please save us postage and your frustration, by sending in your hours by December 1st.

The Master Gardener program at the Nature Center is almost completely done. We have 44 students and they definitely win the food award. They are bringing full meals to class each night! You may meet the new Master Gardener Trainees at volunteer activities in the upcoming year.

We had two large volunteer opportunities recently. The MSU Extension Open House was October 7th, 2003. The following volunteers helped volunteer their time at the event: Jeni Payton, Phyllis Herring, Arlene Brislen, Merlin Selent and Judi Sabo. The pumpkin patch and the pinecone bird feeders were a great hit! I am also glad to hear that many of you came out to the open house.

We held the Firewise Family Day on October 25, 2003 at Lowe's on West Main. This event was to raise homeowner awareness on wildfire prevention in and around their home. The event was well attended with over 250 smoke detectors given out and 75 families participating.

Please see Running Smoothly on page 4



Well, I went and did it. As of the Fall of 2003 I officially no longer have a vegetable garden. With the two older kids out of the house now (one is in the metro Washington, D.C., area and the other is in the Navy) there is just Nancy, Tim and me.

Nancy has been wanting a nice flower garden in the back yard for some time now so late this summer I removed half of the fence surrounding our 28 x 33 foot vegetable garden. What remains is an open 14 x 33 foot area with a fence only on three sides. The "fourth" wall of our outdoor addition is a row of raspberry canes. Nancy is a big fan of raspberry jam from back when she was a kid.

Back in September I made a trip to a South Haven nursery and purchased some 'Sweet Autumn' clematis, Russian sage, and Japanese fountain grass. For the next stop I swung up to Holland and bought some spring bulbs and anemones.

Before I go any farther, I have to mention the most important part of this project. That would be Nancy. She is this landscaper's dream come true. She has given me only one criteria to follow; she wants it to look nice. That's it! I can use any plant material I want, any mulch I want, and create any blooming schedule I wish. I am in heaven!

One of the more interesting things I have done is make a home made bird bath. Since all of the remaining fence material was weathered I thought it might be nice to use some of the old wood to come up with something. I went to my local garden supply store and found a 2-inch deep, 18-inch diameter terra cotta drain dish for the bath. When I got it home I measured the bottom of the dish exactly and made wood frame box for it to nest in. The bird bath doesn't look out of place at all — the only expense was the price of the drain dish. I already had the nails and the wood glue.

With the arrival of spring next year Nancy will be greeted by a mixture of over 400 tulips and daffodils. Before the spring foliage dies back annuals will be added to the four bulb beds. Tulip bulbs have a better chance of having nice blooms the following spring if they can reabsorb the nutrients in their leaves before going dormant.

I relocated all of our gladiolas along the inside of the long fence line. I have found if I plant the corms deeper in the soil, say about 12 to 14 inches, they will survive the winter months without any trouble. Some of the corms I moved were originally planted nine years ago and they have faithfully provided beautiful centerpieces for our dining room table.

The largest bed in the garden is being reserved for dahlias. Late last spring Nancy found a retail display of dahlia tubers marked 50% off. I have shied away from dahlias in the past because they are somewhat pricey and I've never really seen the gorgeous flowers they produce. Needless to say, I was very impressed with the ones she planted this year.

It does seem a little odd to be including articles on starting seeds indoors and designing container gardens, especially since the first snow of the season hasn't arrived. The way I look at it, you never know where you are going to see the "perfect" pot or a packet of seeds that you know would be just right in the vegetable garden next year. I can guarantee if these two stories were published in March all of those cute containers would be bought up and the seeds for that new variety of tomato will be out of stock until 2005. Who needs that?

Oh, one other thing I must write about before I wrap up. Over the Labor Day weekend I was helping my daughter move to her apartment in Virginia. On our free day we headed to The Mall in Washington, D.C., to see the sights.

Over the last few years the National Botanic Garden has been closed for renovations, but now it is open. We spent a couple of hours enjoying what has to be the most remarkable national gallery on The Mall. If you are like me, there is no better spot to take a break and rest your feet than the NBG. Unlike many of the other museums there is very little crowding and it is actually quiet. There is even a meditation garden!

Scattered throughout the Communicator are just a few of the spectacular vistas I saw. I hope you enjoy them. Looking forward to our next visit in March 2004 — have a great holiday season!

What is it?

The subject of the banner photograph featured on page one of this issue of the Communicator is primrose.

FROM THE HOME OFFICE

NEW MASTER GARDENER RE-CERTIFICATION REQUIREMENTS

New Re-certification rules for the 2004 reporting year went into effect October 1, 2003. The new Re-certification requirements are as follows:

- 15 volunteer hours
- 5 education credits

MSU or MSU Extension sponsored programs are credited hour for hour as earned; education from other sources are given half credit for hours attended. Please report actual attended hours for all educational programs. MSU Extension staff and the computer will re-figure your hours if half credit is to be given.

If you have any questions, please contact Emelee at (269) 383-8815.

REPORT FORMS ARE DUE!!

You should have completed your volunteer and education hours by now (deadline Sept. 30) for the 2003 reporting year so we hope you are filling out your Reporting Forms. Deadline to have your reporting forms into the office is no later than December 1, 2003.

For Master Gardeners who graduated from the November 2002 class, you have until November 21, 2003 to complete your hours. For Master Gardeners who graduated from the April 2003 class, you have until April 24, 2004 to complete your hours.

NEW DATABASE ALMOST READY

Thanks to all of you who have already sent in your report forms. There are still a few glitches that

campus is working out in the new database. However, we are trying to keep you informed about the hours you have reported to the office. If you have any questions about the Confirmation Reports you've received recently, please contact the office at 383-8815 (Emelee) or 384-8197 (Karen) and we'll try to get your questions answered and any corrections made.

MARK YOUR CALENDARS - IMPORTANT DATES

Ag Action - Friday, January 23, 2004, 9:00 a.m.-3:00 p.m., at KVCC. As in years past, we will need your help volunteering as room assistants and hall guides. Also, if you sit in a session, you will receive education credits for that session. This is a great opportunity to learn, earn education credits, and volunteer hours. We will be sending out more information as January 23 gets closer, but you may also call the office at 383-8815 or email reifsche@msue.msu.edu to indicate your interest in volunteering that day.

Volunteer Recognition Dinner - Thursday, February 19, 2004, 6:00 p.m. at 'The Birches' on 9th St. Watch your mail for invitations! All certified Master Gardeners will be invited to this banquet to receive their certification awards as well as special honors.

2nd Annual Spring Into Gardening Conference - Saturday, March 20, 2004, 9:00 a.m.-3:00 p.m., at KVCC. There will be 15 different workshops to choose from as well as vendors this year so you can purchase some of those necessary items to get your spring gardening started. Watch your mail for a brochure and complete information.

Please see Home Office on page 5

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THE BENEFITS OF RAIN GARDENS

by Lynda Colvin

Have you ever wondered what happens to rain water after it rains? Excess rainwater or storm water drains into storm sewer inlets that open into a system of underground pipes. Storm water becomes a problem when it picks up debris, chemicals and other pollutants as it flows.

These storm sewers **do not** lead to a sewage treatment plant but flow untreated into a lake, river, stream, or wetland. When the polluted storm water reaches the waterways, it can have many adverse effects on aquatic plant and animal life, as well as other wildlife or humans that use the water.

What can we do to prevent the pollution of our streams and lakes? One thing is to prevent excess runoff of pesticides, fertilizers and herbicides by using them properly and efficiently. We can also design our landscapes to prevent pollution, conserve water, and look beautiful all at the same time.

This is what is defined as a rain garden or a beautiful solution to water pollution. Rain gardens are attractive landscapes, which absorb storm water runoff from impervious surfaces such as roofs and driveways. They can be large or small or for sun or shade or used for homes or businesses. The plants used must be able to adapt to fluctuating soil moisture and occasionally to standing water.

Native plants are best for rain gardens since they thrive in a variety of conditions and are low maintenance. They are also better able to filter pollutants in their vascular systems through their deeper and more complicated root systems. Although rain gardens do not prevent the water from completely getting into the lakes and streams, it does reduce the amount and what actually flows through is much cleaner.

How do we go about planting a rain garden? Determine a site in your yard where excess water will drain as well as the size garden you will need. A rain garden should be approximately 20-30% the size of the area that will drain into it.

Since soil infiltration is usually poor after development, soil replacement is necessary. A 2-3 foot depth of a mix of 50-60% sand, 30% topsoil, and 20-30% compost is recommended for proper drainage. Avoid a large amount of clay content since it can lead to failure of the garden. Dig a 6-inch deep, bowl-shaped ponding area and then plant.

Wet to moist plants such as sedges, prairie grass, blue flag iris, marsh marigolds, joe pye

weed, cardinal flower and swamp milkweed will probably adapt better in the center of the garden.

Moist to dry plants such as little bluestem, bottlebrush grass, switchgrass, purple coneflower, lupine, black eyed susans and bee balm will do best on the edges. As always, never hesitate to move or replace a plant that is not working in its current location. Sit back, enjoy your rain garden and know that you are helping to keep our lakes and streams clean.

RUNNING SMOOTHLY

The following volunteers made the event happen: Jackie Williams, Lorraine Fedorchak-Kraker, Arlene Brislen, Jeni Payton, Amy Tanis, Ann Klimek, Judi Roberts, Dave Hough, Bob Baxter, Kay Douglas, Bob Claeys, Allyson Claeys, Dr. Meg Dupuis, Fran Buell, Janet Green, Suann Good, and Janet Knisley. Thanks to all of you for all the hard work that day!

The Master Gardener Hotline has wrapped up for the 2003 year. We handled over 380 calls, a new record! Next year, we will be beginning the hotline in early April and will end the hotline in late October. All of the hotline volunteers did an excellent job and I enjoyed getting to know all that came to work the hotline.

The Spring into Gardening Conference is really starting to come together. A keynote speaker and also a marketplace have been added for the day. We are trying to keep costs down so that it is an affordable, all day educational event for the entire region.

The workshops for this year will include: Stepping Stones, Cooking with Herbs, Managing the Home Orchard, Champion Trees, Friend or Foe-IPM in Your Landscape, Water Gardening: Installation to Maintenance, Creative Container Gardening, Landscape Design, Heirloom Vegetable Gardening, Flower Arranging, Heavenly Hostas, Gardening with Kids in Mind, and Garden Photography. Don't miss out on the area's largest one-day gardening event!

On a personal note, many have been asking about the wedding and house plans. I am pleased to say that the house is completely bricked, windows are in, doors are hung and I am now picking out faucets! I have 14 acres to landscape, so that will keep me busy after the wedding in May. The wedding plans are going well. I am ahead of schedule as far as planning goes.

This newsletter comes to all a bit early due to schedules. If I don't see many of you, have a great holiday season and enjoy those warm fall days, while they last.

Home Office

HOLIDAY WISHES

The staff of MSU Extension and the Master Gardener program extends warm wishes to you as we approach the holidays. We know that some of you journey south during this time of year, while others are still working in your yards to finish last-minute preparations for winter.

It has been exciting to work with each of you this past year and we hope that next year brings more opportunities for fun, helping others, and learning.

Emelee, Karen, and Bill



One of two fountains located in the foyer of the National Botanic Garden, Washington, D.C.

Back to Basics: How to Start Seeds Indoors

Gardening is a wonderful pastime and filling your garden with plants you started yourself from seeds simply doubles the pleasure. If you think growing from seed is difficult and takes too much time and equipment, the steps and tips here will dispel those apprehensions. Basically all you need to know about specific seeds is whether or not they require light to germinate and the number of days germination takes. With a light garden or a very sunny window, a few containers-purchased or "found"-and a good germinating mix, you will be on your way.

The reasons for starting seeds indoors are many. For much of the country the growing season is too short to allow many annual plants that need

warm soil and hot weather, such as tomatoes, peppers, petunias, and salvias, to mature and bear flowers or fruit if you sow them directly in the ground. Some plants produce very tiny seeds, which are easier to sow and care for indoors; begonia seeds, for example, are so fine they look almost like powder. And then there's the magic: Watching a seedling push up above the soil surface creates a bond between you and nature.

Materials You Need

- Containers: any shallow receptacle that holds soil, such as flats with or without individual cells, peat or paper pots, egg carton bottoms or halved milk cartons. For transplanting seedlings, 2-1/2- to 4-inch diameter plastic, clay or peat pots. To ensure even moisture for seeds-and save yourself time-look for self-watering seed-starting kits.
- Germinating mix: commercial or homemade. Mix your own with a 50-50 combination of fine sphagnum peat moss and vermiculite.
- Seeds of annuals, perennials, vegetables, herbs
- Plastic bags or plastic wrap
- Spritzer (Mister)
- Transplanting mix: A good potting soil will do, but a mix specifically formulated for young seedlings is better. The latter usually contains a coarser grade of sphagnum peat moss than a germinating mix and often includes fertilizer.
- Fertilizer: balanced all-purpose fertilizer. Fertilizer labels always list the main nutrients plants need-nitrogen, phosphorus, potassium-in the same order, with numbers to indicate percentages, such as 5-10-5, 20-20-20. If you prefer to grow with organic rather than chemical fertilizers, use fish emulsion, which is very odiferous but nutritious for plants.
- Plant labels
- Heating cable or mat (optional)

Getting Started

- 1) Wet the germinating mix thoroughly and let it drain. It should be moist but not soggy.
- 2) Fill flats or individual pots with the mix to within about an inch of the top.
- 3) Make shallow row indentations with a ruler or your finger in the flats. It's easier to separate seedlings when transplanting time comes if you sow in rows. Sow thinly so you do not waste seed. If using pots make shallow holes and set 3 to 4 seeds in each.
- 4) Check the seed packet to see if the seeds need light to germinate. If they do, press them lightly into the surface. If they require darkness, cover with 1/4 to 1/2 inch of mix or vermiculite and tamp it down.

Please see Back to Basics on page 7

Versatile Containers

One of the most versatile and easy ways to grow bushels of colorful annual flowers is in containers. The fast-growing popularity of "color bowls" is proof positive that Americans like container growing, whether they do it themselves or have someone else prepare it for them.

If It Will Hold Soil, It is a Container

While many people think primarily of terra cotta, plastic pots, glazed pots, or half-barrels as likely containers for plants, just about any "container" is a possible prospect. Car tires, old shoes, coffee pots, raw bags of growing mix, and just about anything imaginable can be used to grow plants. If whimsical is your style, don't be afraid to try it. The basics remain the same.

The Benefits

Container growing offers many benefits, not the least of which is that you can put a "garden" just about anywhere. Cement balconies on a highrise building can become urban gardens, or splashes of color can be put on a backyard deck or patio. And, providing the containers are not too heavy, potted plants can be moved and rearranged whenever the need or mood arises.

Without a doubt, container gardens will require less weeding than in-ground counterparts, making them ideal for busy people who love gardening but have limited time. However, watering has to be watched more closely. Containers in hot sun can dry out quickly, and even a gentle summer breeze will wick moisture from plants. Be prepared to water daily or even twice daily during long, hot, dry spells.

Start with a Plan

Where would you like to put your containers and what would you like to grow? If an area receives full sun most of the day, you can choose from a wide selection of sun-loving flowers. If the area receives limited sun, choose plants that tolerate less light, and shady areas, of course, call for shade-loving plants. With containers, one of the advantages is that you can move them to keep them in the sun, if you have the time.

Once you know where you want to grow, choosing WHAT to grow is the next big step. No matter what you grow, plan out each container or grouping of containers, making notes of what you would like where. For appealing groupings, include plants of different heights, colors and textures, keeping in mind that plants taller than one and one-half times the height of the container may look unbalanced.

For maximum interest and to create depth,

plan groupings of three to five different sized containers - for example, one or two large pots with plants reaching about 2 or 3 feet tall, one with 18-inch plants, and two with 12-inch or smaller plants. When grouped, these plants will give a three-dimensional look to your mini-garden.

One common mistake made with container gardens is choosing the wrong combination of plants. Don't mix shade-loving plants with sun-loving plants in the same container or in the same grouping. Shade-plants will not perform as well in full sun, and full-sun plants will not perform their best in limited light. Even if mixed and put in partial sun and partial shade, neither type will give its best show. Stick to one type in a container and in a grouping.

You can also create a garden that you can vary quickly by planting masses of one color and variety in separate containers, and then grouping and re-grouping them as you like; one pot of a trailing flower, or one of a mass flower such as marigolds.

Container Basics

Choose a container deep enough for the root systems of the plants you will be growing, and one that will hold ample soil for both support and water retention. A good container will have a drainage hole at the bottom. Before adding soil, put some gravel or pieces of broken pots over the hole to prevent the soil from washing out with each watering. Good drainage can prevent soggy soil that limits a plant's uptake of needed oxygen. Overwatering is more of a problem with plants

Please see Containers on page 8

Attention, Master Gardeners!

We're always looking for interesting items for the *COMMUNICATOR*, so let us know what you're up to.

The copy deadline for the next issue is February 15, 2004. Call or stop in the office by that date with news of interest to your fellow gardeners that you'd like to see included in the March 2004 newsletter.

Sincerely,

Emelee Reifschneider

Emelee Reifschneider
Master Gardener Coordinator

Ann Nieuwenhuis

Ann Nieuwenhuis
County Extension Director

BACK TO BASICS

5) Mist the surface with water to settle the seeds.

6) Cover the flats with a sheet of plastic wrap or set them in plastic bags. Set pots in plastic bags and close with twist ties. This keeps the mix from drying out while the seeds germinate, but check the mix occasionally and moisten if necessary by spritzing with water.

7) Place the flat in a warm, bright location or in a fluorescent-light garden. Check the seed packet for specific soil temperatures for germination. Generally, seeds germinate with soil temperatures of 70-75° F.

8) When the seedlings emerge, remove the plastic covering. Seed packets give you an idea of germination time, usually 7 to 10 days, sometimes as long as 2 to 3 weeks.

9) Keep the mix evenly moist, not soggy. Water from the bottom by setting flats and pots in a sink filled with a couple of inches of water; remove them when you see moisture on the surface of the mix.

Moving On

The first leaves on a seedling are cotyledons, not true leaves. Their shapes usually do not look like the plant's familiar leaves. When seedlings in flats grow at least two sets of true leaves, transplant them into pots.

1. Moisten the transplanting mix and let it drain. If you use an all-purpose potting soil, add a handful of vermiculite for each quart of mix to lighten the texture.

2. Fill 2-1/4-inch pots about three-quarters full.

3. Use your fingers or a pencil to pick each seedling out of the flat, carefully holding each by the leaves not the stem. (Plants readily grow new leaves but not broken stems.)

4. Set the transplant in the pot, filling in around the roots with more mix and firming the mix down.

5. Place pots on a sunny-preferably south-facing-window sill or in a light garden.

Growing Well

- Water transplants regularly from the bottom until they grow 3 to 4 inches tall. Then you can begin to water from the top, if you want.
- Feed as you water by diluting a water-soluble fertilizer, such as fish emulsion, to half the strength recommended on the label. Or, feed at regular strength every week to 10 days.
- You do not need to move most flowering plants into larger pots before setting them outdoors in

the garden. Some vegetables, such as tomatoes, produce extensive root systems and grow quickly into lush plants; transplant them at least one more time into larger pots before the weather warms up enough to put them in the garden.

- To encourage compact, bushy plants, occasionally pinch off the growing tips of herbs and most flowering plants.

Let There Be Light

Many seeds germinate best—more quickly and more abundantly—if you do not cover them with a mix when you sow.

Ageratum	Lettuce	Begonia
Nicotiana	Coleus	Petunia
Columbine	Parsley	Dill
Feverfew	Salvia	Gaillardia
Savory	Impatiens	Yarrow
Oriental Poppy		

A Few Do's

- Know the date of the average last spring frost in your area; you need to start most plants indoors a certain number of weeks before that date. Seed packets include that information.
- Give pots on windowsills a quarter turn every week so plants grow straight instead of bending towards the light.
- Opt for the easiest plants to start indoors if this is your first attempt. These include basil, coreopsis, dianthus, gaillardia, gloriosa daisy, marigold, oregano, yarrow, and zinnia.
- Label your seed containers as you sow.

A Few Don'ts

- Combine different varieties of seeds in one flat unless they germinate in the same number of days.
- Let seedlings in flats grow large before you transplant them. Their roots become too entwined, making them difficult to separate without damage.
- Start root vegetables indoors.
- Over water seedlings. Soggy soil promotes fungus and root rot.

Outdoor Preferences

Some plants resent being transplanted, but if your growing season is short, you can start them indoors in individual peat or paper pots, which biodegrade; set plant in its pot in the garden.

Annual Phlox	Fennel
Chervil	Lupine
Cucumber	Nasturtium
Dill	Poppy

The National Garden Bureau is the source of this article. They credit Eleanor Lewis as the author.

CONTAINERS

grown in the shade than with plants grown in full sun. If you want to use a decorative container that doesn't have a drainage hole, consider placing a pot in a pot. Put a few inches of gravel in the bottom of the decorative pot to hold the flowering pot off the bottom.

Use a good, sterile, porous potting medium for filling your containers. Mixing a time-release fertilizer into the medium can help feed the plants as they grow.

There are three ways to grow plants for your containers. You can sow seed directly into the container to start them. If you do this, follow the germinating instructions on the seed packet, and be prepared to thin out the plants when they are young. You can also start from seed using a starter kit, and then transplant the seedlings to the containers when they are ready. Or, you can purchase started bedding plants at your local garden center or nursery and plant those in the containers.

How many plants per container? If you provide enough soil and water you can space plants closer together than usual recommendations. In a larger pot, you could plant nine to 12 transplants of flowers, depending on how spreading they are. Be careful not to overplant, or when the plants mature they will overpower and overshadow one another and look too crowded.

Designing a Container Garden

Color, texture and flower form are the basic elements in designing a container garden. With color today, anything goes. Gone are the days when pink and scarlet clashed - today you can combine any colors you want in a pot or in a grouping.

Texture is often best brought out by including foliage plants such as leather-leaved ferns, or asparagus sprengeri with its long lacy fronds. Let trailing plants spill over the edges of the containers to soften and de-formalize plantings. Some perennial ground covers offer interesting textures, and can be dug up and replanted in the garden in fall when the annuals have died back.

Flower forms can be grouped into three basic shapes. Line forms like salvia splendens or snapdragons are tall and spiky. Mass forms such as daisies, petunias or marigolds have many small or large flowers. Focus forms such as African marigolds, or a spectacular geranium plant, are characterized by large or distinctive flowers.

One example of combining these forms would be a large container of red salvia (upright form and tall), pale blue petunias (round,

masses of flowers, medium height), and white alyssum (small, lacy flowers, low and trailing). Or use tall blue lavender for height, and white petunias and red creeping phlox for color.

Plant individual pots of one type (all salvia, for example, or combine one or two types in a larger pot (salvia and sprengeri), depending on the look you want for your grouping. The idea is to combine color, texture and varying heights in a grouping of containers.

Container Garden Care

Keep your containers well watered, and watch for any wilting when the wind blows. If no fertilizer was incorporated with the growing mix, be sure to fertilize plants so that they keep growing smartly. Weed as necessary.

Container growing isn't that much different than growing plants in a garden plot, but can offer more versatility and a lot less weeding work.

The National Garden Bureau is the source of this article.



Heirloom Plants display at the entrance of the National Botanic Garden, Washington, D.C.



Vanda orchid, Nellie Morley 'Red Berry', National Botanic Garden, Washington, D.C.

This November 2003, Continuing Education Test is one of a series of CE tests presented by the *Communicator*. Each test, when completed and passed, will provide one hour of MSU-sponsored horticultural training credit. A passing grade is 80% correct. Please submit your test to: Attn: Master Gardener Program MSU Extension -Kalamazoo County, 201 W. Kalamazoo Ave., Room 302 Kalamazoo, MI 49007. All Master Gardeners may take this CE Test for education credit. The hour is education not volunteer, so it will not count towards your basic certification.

1. Where do Firebrats normally live?
 - a. basements
 - b. in trees
 - c. in flower
 - d. near fireplaces
2. Hotline question- "I have a tree that I purchased late last fall. The leaves came on this year and they are quite yellow. Is this normal?" What should be your first question when handling this call?
 - a. Where is the tree located?
 - b. Did you fertilize?
 - c. What kind of tree is it? What variety if known?
 - d. How did you plant it?
3. True or False- The average date of first freeze in Michigan is somewhere between September 15-October 1st.
4. True or False- Raccoons and Skunks are nocturnal feeders.
5. The Latin name for Pyrenean cranesbill is:
 - a. Geranium endressi
 - b. Iris siberica
 - c. Aegopodium polegararia
 - d. Cercis Canadensis
6. True or false- the majority of landscape plant injury is caused by poor growing conditions.
7. Hotline question: "I planted potatoes for the first time in my vegetable garden. Actually, the area they were planted in used to be lawn for about 20 years. The potatoes I dug this year had narrow cylindrical holes in them. What is going wrong?"
8. What does MSDS stand for?
 - a. Michigan State Diagnostic Sheets
 - b. Material Safety Data Sheets
 - c. Michigan State Demonstration Sites
- 9-10. Two effective means of managing weeds in the landscape are: