



THE GARDEN SPADE



A monthly Gardening Publication of the University of Missouri Extension -- Southeast and East Central Regions

A New Look For The Newsletter

by Donna Aufdenberg

Katie Kammler, Sarah Denkler and I have worked on a new newsletter format for the last few months. In last months newsletter, we asked Master Gardeners to submit ideas for a new name for the newsletter. We were so surprised to see so many entries with such unique qualities.

Some of the suggestions included

“Let’s get Growing!, The Gardener’s Gazette, Dig in To Gardening, The Sunny Day Times, Grow Notes, Growing Season, Grow Smart, Southeast MO

Buds and Blooms, and Muddy Day Times (I didn’t list all of them),

The three of us really thought “The Monthly Spade” submitted by Betsy Kunz from Jackson, Mo was a neat sounding title that gave a unique twist to the newsletter. A spade is defined as a digging tool that can loosen the soil and break up clumps. In this case we are going to be using our “Newsletter Spade” to dig up all sorts of information, break it up so it is easier to understand for gardeners to keep learning!

So what does this new newsletter

format have to offer? First, we are hoping that the new format is easier to read and more attractive. In doing this, we are also hoping to attract more readers and offer it to all gardeners in the local area - not just Master Gardeners. In choosing a new format, we are creating a fresh new look that our two new co-editors and contributors had input



into. We are hoping to use more Master Gardeners to write!!!! (Hint, Hint....Please consider writing for us!!!!)

Some of the segments we are going to be continuing include the monthly garden calendar,

plant trivia, disease or insect of the month, and timely articles from horticulture specialists. We are also hoping to add a segment on “From the Master Gardener” which will consist of an article or articles from area Master Gardeners. We are also adding a segment on Plants of Merit, From the specialist (a topic related to horticulture but written by another specialty), and a monthly Master Gardener calendar of events.

Another challenge many of our County Extension offices are facing

(Continued on page 2)

January 2010

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A New Look For The Newsletter

by Donna Aufdenberg

(Continued from page 1) is budgetary challenges. Since our offices rely on County funding, as of February 2010, the newsletter will be found on the web free of charge, however, if a hard copy is desired, there will be a \$10 yearly subscription. I know that we tried collecting subscriptions fees before and it quickly faded away but now we are at a point where fees are essential if Master Gardener and other gardeners want a hard copy !

The newsletter change is a work in progress. One thing that we want to reassure you is that we are still open to suggestions and articles from Master Gardeners. We are still writing for you so please feel free to send us your meeting dates, information on functions and seminars and most of all, let us know how we are doing!!



Congratulations to the Winner of our Newsletter Naming Contest! Betsy Kunz from Jackson, Mo will receive a one year subscription to "The Garden Spade" and a \$25 gift certificate to the garden center or nursery of her choice! Thank you for your contribution to the new look for 2010 !!!



If you would like to continue to receive a hardcopy of the Garden Spade Newsletter, please fill out the form and enclose \$10.00 for your annual subscription. The \$10.00 covers printing and mailing costs associated with the newsletter.

Mail Payment to:

University of Missouri Extension
c/o Donna Aufdenberg
P.O. Box 19
Marble Hill, MO 63764

Subscription Form for The Garden Spade Newsletter

Yes, I would like to receive the news by postal mail, my \$10.00 is enclosed

Method of Payment

Check

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Name _____

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Submit to:

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January Gardening Calendar

By Donna Aufdenberg

Outdoor flowering plants and Ornamentals

- Gently brush off heavy snows from tree and shrub branches.
- To reduce injury, allow ice to melt naturally from plants. Attempting to remove the ice may damage plants further.
- Limbs damaged by ice or snow should be pruned off promptly to prevent bark from tearing.
- On warm days, check to see if any perennials have been heaved by freezing and thawing of soil. Firmly press down any that have lifted and cover with at least 2 inches of organic mulch.
- Plan herbaceous flower beds now. Changes can be made early in the spring.

Indoor Plants

- Wash the dust off of house plant leaves on a regular basis. This allows the leaves to gather light more efficiently and will result in better growth.
- Start new plants from cuttings to revive overgrown plants.
- Try not to over-water plants during the winter months. Always check the soil for dryness before watering.
- If plants seem to dry out too fast, make sure they are sitting away from areas near heat vents or draftier areas.

Vegetable Gardening

- Review your vegetable garden plans. Perhaps a smaller garden with fewer weeds and insects will give you more produce.
- As seed and nursery catalogs arrive, think of crops and varieties that you want for the upcoming garden season.
- Analyze last year's planting, fertilizing and spraying records. Make notations to reorder successful varieties, as well as those you wish to try again.
- Before ordering new seed, do germination tests on seeds to see if the seeds are still viable.

Miscellaneous

- Take time now to relax and read all of those horticultural magazines and garden books that were put aside during the busy holiday season.
- Draw a map of your garden and make copies of it. Beds usually stay in the same place year after year, but the crops rotate each year. Each year, take a clean copy of the plan and fill it in and use the back of the plan to record notes. Keep each year's plan in a three-ring binder for easy cross-checking of varieties, rotations, etc.
- It is time to start thinking FRUIT TREE MAINTENANCE. Plan to prune your trees and apply dormant oil in the next couple of months.
- When spraying fruit trees, make sure that you spray the whole tree and not just the part that you can reach.

Seed Starting Time!

Scour through your old seed packets and take inventory of what seeds you need to order. Flip through the catalogs and order your seeds!

Gather your seed-starting equipment, put in new light bulbs, and sanitize your flats and pots because it's time to get started for **SPRING!!**

Start seeds of Pansies, Snapdragons, and hardy Perennials!

Towards the end of the month, start onion seeds, cabbage, and other frost hardy vegetables.



Pruning and Training Grapes

by Katie Kammler

I think one of the most common questions that come into local extension offices is how to prune and one of the most difficult plants to prune is grapevines. Grapes can be difficult because there are many options available. Pruning and training are probably the most important cultural management practices for grapes. There is a balance between pruning severity and crop load that is essential for production of high-quality fruit year after year.

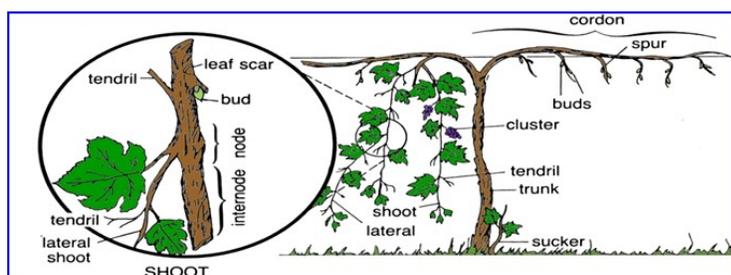
Once vines are planted, a grower has several op-

tions for pruning and training the vines. For simplicity, I am going to use a high cordon system as the example. Just keep in mind that there are more options available and research which one is the most feasible for you. Young vines should be supported and the trellis established soon after planting to provide this support. Proper training begins in the first year and the goal is to establish strong, straight shoots that are long enough to be retained as trunks for the second growing season. The biggest factor that effects shoot vigor is the management of weeds and fertility. If the weeds are controlled and adequate nitrogen fertilizer is applied, they should produce several shoots capable of reaching the top wire of the trellis system in the first year. Grow tubes are popular for vineyard establishment. Grow tubes are plastic tubes that create a greenhouse like environment for the new plants. Second year management is much the same as the first year—maximizing the vegetative growth. In order to do this, weed control and nutrition are once again the most important factors. At the start of the second year, canes of the

previous year's growth will become the trunk. Cordons will also be developed. Shoots are retained at the appropriate position and trained along the top wire.

In the third year, the best canes are retained to be cordons. Other canes are cut back to renewal spurs or removed. The new cordons should be loosely wrapped about one full turn over the top

wire and secure the ends of the cordons to the top wire. Also if there are healthy lateral shoots on the cane, they can be cut back to one or two-node spurs.



After the vines are established, the primary purpose is to balance the amount of crop produced to the vine's capacity to ripen the crop. The relationship between pruning, yield, and vine vigor is what establishes this balance. Grapevines produce fruit on one-year old wood. Canes to keep are selected for good sun exposure, healthy and free of disease, at least pencil diameter, originate from the cordon, are a bright and uniform reddish-brown color, and the internode length (distance between buds) should be 4 to 6 inches. As a general rule of thumb, approximately 60 buds can be left on a grapevine. There is also a balanced pruning formula using the weight of the one year old wood to figure out the vine vigor and how many buds a particular vine can support. This is short overview on pruning grapes. The key thing to remember is that growing grapes takes a lot of labor and money to achieve a healthy plant with a good harvest. For more information online, refer to [Growing Grapes in Missouri](#) and the [Midwest Grape Production Guide](#).

Preventative Care of Fruit

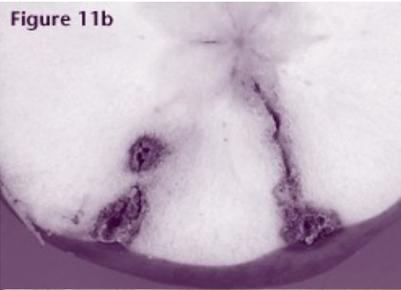
by Sarah Denkler

For most, our backyard fruit is a wonderful treat that we look forward to. Some feel that if we get a crop we are lucky, especially in Missouri's varied climate.

Fruit often needs a little extra care and application to prevent what would be an otherwise fantastic crop from surrendering to disease.

One important responsibility when growing fruit is to clean up any leftover limbs, leaves or fruit after the harvest and in fall. Do not allow waste product to overwinter. These materials often harbor the very bacteria and fungus that we work so hard to inhibit. This simple step can prevent a lot of

Figure 11b



Codling moth damage inside edible fruit could be prevented with a spray program. Picture is courtesy of Washington State University Tree Fruit Research and Extension Center.

worry but it is the one step that we will often forget. Another important step that many homeowners can take is to spray their fruit when buds first start to swell. A regular spray schedule can prevent the scenario, "My crop looked fantastic last week and now it is completely gone." Most symptoms occur long after the bacteria or fungus have infected the plant. Infection usually occurs when buds and flowers first pop open. A schedule of prevention during bud break can prevent the death of your fruit later in the season.

The following is a basic guide for apples and pears. This provides the **Application time/** and Material used.

Before bud swell / Dormant oil applied above 40°F for mites

Green leaves .25" long / If you have had trouble with primary scab in the past then apply captan or mancozeb

Just before blossoms open / Mancozeb can be used for rust

When blossoms are 25% open / Use streptomycin for fire blight at 5 day intervals until petal-fall stage. If fire blight is severe then remove tree and burn to prevent further spread.

At petal-fall, when most have fallen / Apply captan or mancozeb for control of scab

After petal-fall / To prevent codling moth from burrowing into the core apply carbaryl, malathion or spinosad 10 days after petal-fall and at 10 day intervals through May.

Summer/ Continue codling moth sprays at 14 day intervals June through August. Malathion may be used for mites control. Pay attention to your last spray in relation to the number of days needed before harvest. Malathion has a 3 day harvest interval on apples.

This is one example of a spray program and only covers the most important applications. You may also want to have a schedule for peaches, nectarines, plums, apricots, cherries, strawberries, brambles and grapes. This information is available from your local extension office in the MU Guide 6010 - Fruit Spray Schedules for the Homeowner.

"My crop looked fantastic last week and now it is completely gone!"

DISEASE OF THE MONTH - Discoloration

by Sarah Denkler

Symptom	Possible Causes	Possible Solution
Brown or scorched leaf tips	Overwatering; Excessive soluble salts and nutrient toxicities (fluoride, copper, boron); Low humidity; Pesticide or mechanical injury	Deep watering will allow roots to obtain water as well as leach built up salts and other nutrients. Check soil water regularly and water when dry to help humidity as well.
Leaf spots, blotches, blemishes, blisters, or scabby spots	Intense light (sunburn) associated with window; Chilling injury (below 50 degrees F); Chemical spray injury; Overwatering; Fungal or bacterial infections (rare unless recently moved from field or greenhouse)	Make sure to check your plants daily, scouting for change. If a plant is too close to a window it can have too much exposure to light and cold. Move the plant.
Older foliage yellow-green	Insufficient fertilizer, especially nitrogen; Poor root health, pot-bound or poor drainage; Insufficient light	Plants can be repotted every year. If you have your plant in the size pot you would like to maintain then prune roots and shoots to maintain the size of the plant relative to the pot.
New foliage yellow-green	Soil pH (acidity) imbalance; Minor nutrient imbalance	Add fertilizer or repot.
Foliage yellow-green	Too much light; Insufficient fertilization; High temperatures, dry soil; Insect infestation or root rot disease	Daily scouting will help to determine which of these problems to address. Deep watering (not daily) and proper location for light go a long way to help plant health.
Leaf drop	Overwatering, Excessive dryness, fertilizer or soluble salts; Sudden change in light, temperature, humidity; Root rot disease or pot bound	You may have to check for root problems first. If you are scouting daily then you have caught this problem before it is lethal.
Foliage wilted or drooping	Overwatering, excessive dryness, excessive fertilizer, soluble salts, poorly drained soil; A toxic chemical poured into soil.	You will know if it is a chemical problem. If not, deep watering when necessary and possibly new soil will help.
Roots brown, soft or rotted; tissue "slips off" leaving strings	Overwatering, excessive fertilizer, soluble salts, compacted soil, poorly drained container; A toxic chemical poured into soil	This is usually an overwatering issue. Water deeply when soil is dry.
Yellowed leaves with speckling; webbing near growing points	Spider-mite infestation	Soapy water sprayed from a squirt bottle can do wonders. Spray with a hose outside if the weather allows. You may need chemical applications but take your plant away from daily traffic for this.
Sticky substance on plant; Mold on leaves; Moving specks on plant; Leaf drop; Dieback; Leaf point distortion	Scale or mealy bug infestation	Prune severely infested branches and burn, use chemical spray or oil. Monitor daily for change.

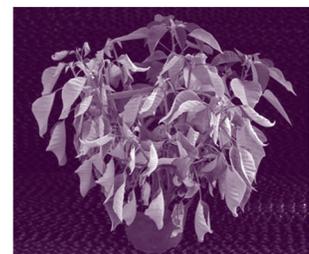
The care of indoor plants can be an intimidating responsibility. If you have never tried it start with a plant that requires little care and then move on to something more challenging as you build your confidence.

Many may believe that their plants harbor some terrible disease when they start to decline. Very often it is a matter of poor watering technique. Too much or too little water can have a tremendous effect on a plant especially if we tend to show little attention to our plants.

You may not realize that your plant has been losing leaves for over a month from improper watering until there are only a few leaves left.

Monitor plants continuously to prevent avoidable problems from water, temperature and poor soil. The above chart may help to diagnose problems and provide options to save your cherished possessions.

If you do have a disease then you may do well to discard that plant and start fresh. If you monitor your plants daily, you should not have a problem with disease. Don't mix new plants with those you have had until you are sure it is clean from insects and disease.



Root rot of Poinsettia due to over watering. Provided by University of Delaware Extension.



Group News - What's Happening

January 2010

Sun Mon Tue Wed Thu Fri Sat

It is the hope of those who put this publication together that you will embrace it as a quality source of knowledge, educational opportunities, and informational events. With that in mind we will try to provide you with all upcoming events throughout the area that might interest those who subscribe. If you have a horticultural event coming up and would like to have it included in the calendar please contact the editor in your area.

3	4 Parkland Master Gardener Meeting at the Farmington Courthouse Annex, Third Floor at 6:30 p.m.	5	6	7 7-9 - Great Plains Vegetable Growers Conference in St. Joseph, MO. Contact Donna for more info!!	8	9
10	11	12	13	14	15	16
17	18 Ste. Genevieve Master Gardener Meeting at the Ste. Genevieve Co. Ext. Center at 6:30 pm.	19	20	21 Cape Girardeau Co. Master Gardener Meeting at the Cape Co. Ext. Center at 7:00 pm.	22 22-23 - Ag Expo at the Black River Coliseum in Poplar Bluff. Educational Seminars on Friday include Farmers Market, Emergency Preparedness, Canning, Horse health and Arthritis in Agriculture.	23
24	25 Perry Co. Master Gardener meeting at the Perry Co. Ext. Center at 6:30 p.m.	26	27	28	29	30
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More Upcoming Events....

FEBRUARY

- 1—Grow Your Farm Workshop begins in Poplar Bluff. Contact Sarah Denkler for more info!
- 2 - Come learn about Fruit Tree Care at the Perryville Career Center! Registration is being taken by the Perryville Career Center. Contact Donna Aufdenberg for more information.
- 4 - Grow Your Farm Workshop begins in Fredericktown. Contact Donna Aufdenberg for more info!!
- 6 - Perry County Master Gardener's Symposium will be held on February 6, 2010 at the Perryville Higher Education Center from 7:30 a.m. to 12 p.m. Seats fill up fast so call to get your registration form! 573-547-4504

15-17 - Annual Small Fruit and Vegetable Conference held at Lake of the Ozarks. For more information see <http://mtngrv.missouristate.edu/commercial/Conference2010.htm>.

MARCH

- 2 - Poplar Bluff Master Gardeners meet on the first Tuesday at Holy Cross Episcopal Church in Poplar Bluff at 6:30pm
- 6 - Parkland Master Gardener Gardening Symposium will be held on March 6, 2010 at the Mineral Area College in Park Hills from 8 a.m. to 3 p.m., Seats will fill up fast so call to get your registration form! 573-883-3548
- 15 - Ste. Genevieve Master Gardener Meeting is held every Third Monday of each month at the Ste. Genevieve County Extension Center at 6:30 pm.
- 23 - Perry County Master Gardener Meeting is held every Fourth Monday of each month at the Perry County Extension Center at 6:30 pm.

Editor's Corner

The Monthly Spade is published monthly by University of Missouri Extension staff for individuals and families living in Southeast and East Central Missouri. This newsletter is provided by your local extension council.

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We welcome and encourage Master Gardener groups and individuals to submit items to the newsletter. We encourage the submission of any news such as upcoming volunteer opportunities, community events related to gardening, warm wishes or congratulations to fellow gardeners. We also encourage Master Gardeners sharing experiences and writing articles on timely topics.

All entries into the group news sections must be received by 4:30 on the 15th of each month for the following months news.

Email News to: kammlerk@missouri.edu,
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Disclaimer: No special endorsement of mentioned products is intended, nor is criticism implied of similar products not mentioned.

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We're on the WEB!!

**[http://extension.missouri.edu/bollinger/
MasterGardener/semomg.htm](http://extension.missouri.edu/bollinger/MasterGardener/semomg.htm)**
